

COUNTY BOROUGH OF IPSWICH.

Annual Report

of the

Medical Officer of Health and School Medical Officer

for 1936

By A. M. N. PRINGLE,
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School Medical Officer, Superintendent Isolation Hospital,
Medical Officer to the Ipswich Port Sanitary Authority,
Fellow of the Royal Sanitary Institute,
etc.

IPSWICH:
EAST ANGLIAN DAILY TIMES CO. LTD.
1937.

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County Borough of Ipswich.

Public Health Department,
Elm Street,
Ipswich.

1st August, 1937.

Ladies and Gentlemen,

I have the honour to present my Annual Report for the year 1936.

Three more areas were represented as Clearance Areas under the Slum campaign and are now being dealt with.

I thank the members of the Public Health Committee for their support during the year.

I thank the members of the staff of the Public Health Service for another year of loyal service.

Your obedient Servant,

A. M. N. PRINGLE,

Medical Officer of Health.

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COUNTY BOROUGH OF IPSWICH.

Public Health Officers of the Authority.

December 31st, 1936.

MEDICAL (Whole Time).

Medical Officer of Health, School Medical Officer, Tuberculosis Officer and Superintendent, Ipswich Isolation Hospital.
A. M. N. PRINGLE, M.B., C.M. (Edin.), D.P.H. (Camb.).

Deputy Medical Officer of Health, etc., etc.
A. W. GAYE, B.A., M.B., B.CH., D.P.H. (Camb.), M.B., CH.B. (Manc.).

Assistant Medical Officer of Health, etc., etc.
DORIS E. P. JOLLY, M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.

Clinical Tuberculosis Officer and Assistant School Medical Officer.
R. PHILPOTT, M.A., M.R.C.S., L.R.C.P.

Resident Medical Officer, Ipswich Isolation Hospital.
MARGARET SPENCER, M.R.C.S., L.R.C.P. (Appointed 1/4/36)

Medical Superintendent, Ipswich Sanatorium.
W. F. SUTCLIFFE, M.R.C.S., L.R.C.P.

Assistant Medical Officer, Ipswich Sanatorium.
J. M. KEARNS, M.B., B.CH.

Resident Medical Officer, Heathfields Municipal Hospital.
DOROTHY E. EGLINGTON, M.R.C.S., L.R.C.P.

Part Time.

Medical Officer V.D. Clinic.
F. FOWLER WARD, B.A., M.B., B.CH.

Medical Officer Heathfields Municipal Hospital and St. John's Home.
F. R. STANSFIELD, M.D., B.S., F.R.C.S., L.R.C.P.

District Medical Officer under Poor Law Acts
W. F. FRYER, L.R.C.P., M.R.C.S.

Public Vaccinator.
H. W. FAREBROTHER, M.R.C.S., L.R.C.P., (London).

Consultants.

Orthopædics.
R. CHARLES, O.B.E., F.R.C.S.

Puerperal Fever
F. R. STANSFIELD, M.D., B.S., F.R.C.S., L.R.C.P.

DENTAL SURGEONS (Whole Time).

Education and Public Health
T. A. EDMONDSON, L.D.S., R.C.S. (Eng.).
A. W. T. WARD, L.D.S., R.C.S. (Eng.)
R. CUTHILL, L.D.S. (U. Liverpool)

PUBLIC HEALTH OFFICERS OF THE AUTHORITY—continued.

OTHER OFFICERS (Whole Time).

Chief Sanitary Inspector.

H. L. BATY 1, 2.

District Sanitary Inspectors.

G. ELLISON. 1, 2

L. J MASSAM. 1, 2.

E. E. MORGAN. 1, 2. (Resigned 29/2 36).

G. L. TURNER. 1, 2 (Resigned 8/3/36).

W. L. BROWN. 1, 2 (Appointed 1/2 36).

T. S ELLIS. 1, 2. (Appointed 16/3/36).

A. STUBBS. (Appointed 14/4/36)

Inspector under Shops Acts:

B. WHITE. 1.

Health Visitors.

Miss F. PEPPER. 3, 4, 5

Miss M. SPRINGETT. 3, 4, 5.

,, F. M. CROSS. 3, 4, 5.

Mrs. E. F. FENNA. 3, 4, 5

School Nurses.

Miss M. SANDBACH. 3.

Miss F. ILETT. 3

Miss L. COOKE. 3, 4, 5. (Appointed 15/6/36).

Tuberculosis Nurse.

Miss E. JONES. 3

Matron Isolation Hospital.

Miss E. LAW. 3

Midwives, Maternity Home.

Miss F. WILLCOX. 3, 4 (Resigned 19/10/36).

Miss G. KENNY. 3, 4

,, K. KENNEDY. 3, 4 (Resigned 26/7/36).

,, B. A HOGG. 4 (Resigned 31/1/36).

,, A. T McLAUGHLIN. 3, 4 (Appointed 1/3/36).

,, M. N. FIDOE 3, 4 (Appointed 27/7/36)

Miss D. G HEWITT. 3, 4 (Appointed 8/12/36).

Chief Clerk

H. J. WALTON. 1.

1.—Sanitary Inspectors Certificate R.S. Institute.
2.—Meat Inspectors Certificate.
3.—Trained Nurse.
4.—Certificate of C.M.B.
5.—Health Visitors Certificate R.S.I.

Part Time.

Public Analyst.

W. LINCOLNE SUTTON, F.I.C.

Veterinary Surgeon

W. J. BROWNING, M.R.C.V.S.

Vaccination Officers

Ipswich (Eastern) Sub-District, S JAMES

Ipswich (Western) Sub-District, H J WALTON

Matron, Maternity Home

Miss M BLYTH, 3, 4, 5

GENERAL PROVISION OF HEALTH SERVICES FOR THE COUNTY BOROUGH OF IPSWICH.

HOSPITAL PROVISION.

1. Fever.

Ipswich Isolation Hospital, Foxhall Road, Ipswich—110 beds, including cubicle block of 24 beds for suspects or mixed infections—accommodation for all forms of Infectious Diseases.

2. Small Pox.

Ipswich Small Pox Hospital, Foxhall Heath, near Ipswich—24 beds.

3. Tuberculosis.

Ipswich Sanatorium, Foxhall, near Ipswich—120 beds, early cases.

Ipswich Isolation Hospital :—

Advanced Tuberculosis—30 beds.

Surgical Tuberculosis—24 beds.

East Suffolk and Ipswich Hospital (Voluntary Hospital)—beds as required for operative treatment.

4. Maternity.

Ipswich Maternity Home, Wingfield Street, Ipswich—15 bedrooms (18 beds) and 2 Labour Rooms.

5. Municipal Hospital.

Heathfields Municipal Hospital—311 beds.

AMBULANCE FACILITIES.

(a) Infectious Cases.

A Motor Ambulance has been provided by the Council and Motor Vans for the removal of infected bedding.

(b) Non-Infectious and Accident Cases.

The Council have no Ambulances for use in these connections, but assists the local Branch of St. John Ambulance by an annual grant.

CLINICS AND TREATMENT CENTRES.

(As existing at 31st December, 1936.)

1. INFANT WELFARE CENTRES.

(a) PUBLIC HEALTH DEPARTMENT, ELM STREET.
Every afternoon (except Saturday), 2.30 p.m.—5.0 p.m.
Medical Officer in attendance Monday and Wednesday.

(b) BRANCH CLINIC, CLAPGATE LANE.
Every Tuesday, Wednesday and Thursday afternoon, 2.30 p.m.—5 p.m.
Every Monday and Friday afternoon, 4 p.m.—5 p.m.
Medical Officer in attendance Tuesday and Thursday.

2. ANTE-NATAL AND POST-NATAL CLINICS.

(a) PUBLIC HEALTH DEPARTMENT, ELM STREET.
Every Tuesday, Thursday and Friday, 10 a.m.—1 p.m.

(b) BRANCH CLINIC, CLAPGATE LANE.
Every Monday and Wednesday, 10 a.m.—1 p.m.

3. ARTIFICIAL LIGHT CLINIC (Elm Street only).

Every afternoon, except Wednesday and Saturday, at 2.30 p.m.

4. SCHOOL CLINICS (Elm Street and Clapgate Lane).

Every morning. Special sessions in the afternoon.

5. TREATMENT CLINICS (Elm Street and Clapgate Lane).

Open every morning. Every afternoon except Saturday.

6. DENTAL CLINICS (Elm Street and Clapgate Lane).

Children attend by appointment.
Tuberculosis patients, expectant mothers and children under 5 years by special appointment.

7. TUBERCULOSIS DISPENSARY (Elm Street only).

New cases each Tuesday and re-examinations each Friday at 10 a.m.
Children every Friday at 2.30 p.m.
Treatment cases each Saturday at 10 a.m.

8. TREATMENT CENTRE (VENEREAL DISEASES).

Clinics are held at the East Suffolk and Ipswich Hospital (Voluntary Hospital) as under :—

Adults—Males, Wednesday at 5.30 p.m., Friday at 1 p.m.
Females, Wednesday at 4.0 p.m., Friday at 2.30 p.m.
Children, Thursday at 11 a.m.

STATISTICS AND SOCIAL CONDITIONS.

Land Area of the Borough in acres	8,692
Population, Census 1921	79,371
Population, Census 1931	87,557
No. of Inhabited Houses (1931)	21,923
No. of Inhabited Houses (at 31/3/1936) according to Rate Books	26,336
No. of Families or Separate Occupiers (1931)	22,758
Rateable Value, March, 1936	£584,527
Sum represented by a Penny Rate, 1936	£2,204

EXTRACTS FROM VITAL STATISTICS OF THE YEAR 1936.

	Total.	M.	F.	Birth-Rate.
BIRTHS—Legitimate ...	1,322	677	645	14.9
.. Illegitimate ...	56	24	32	
				Rate per 1,000 Total Births.
STILLBIRTHS	47	24	23	35
				Death Rate.
DEATHS	1,113	533	580	12.03

Percentage of Total Deaths occurring in Public Institutions ...		40%
Number of women dying in, or in consequence of, child-birth ...	From Sepsis ...	2
	From other causes ...	6
Death-rate of Infants under 1 year of age per 1,000 live Births :— Legitimate 46, Illegitimate 14	Total	45
Deaths from Measles (all ages)		3
Deaths from Whooping Cough (all ages)		5
Deaths from Diarrhœa (under 2 years of age) ...		2

POPULATION.

The following Table shows the changes that have taken place in the numbers of the population of Ipswich since the first census in 1801 :—

Year.	Census Populations.			Population Increases					Females per 1,000 Males.
	Males.	Females.	Persons.	Total Increases	Per cent. Proportions.	Natural Increases.	Migrations. Inward	Migrations. Outward.	
1801	4,984	6,293	11,277	—		—	—	—	1,262
1811	6,064	7,606	13,670	2,393	21.2	—	—	—	1,254
1821	7,831	9,355	17,186	3,516	25 6	—	—	—	1,194
1831	9,169	11,032	20,201	3,015	17.5	—	—	—	1,203
1841	11,894	13,490	25,384	5,185	25 6	—	—	—	1,134
1851	15,474	17,440	32,914	7,530	29 6	2,822	4,708	—	1,127
1861	17,667	20,283	37,950	5,036	15 3	4,075	961	—	1.148
1871	20,047	22,900	42,947	4,997	13.1	4,373	624	—	1,143
1881	23,608	26,712	50,320	7,373	17 1	5,290	2,083	—	1,131
1891	26,658	30,712	57,360	7,040	13.9	7,033	7	—	1,151
1901	31,181	35,449	66,630	9,270	16 1	6,610	2,660	—	1,136
1911	34,980	38,952	73,932	7,302	10 9	8,232	—	930	1,113
1921	37,359	42,012	79,371	5,439	7.4	5,979	—	540	1,124
1931	41,285	46,217	87,502	8,131	10 2	5,616	2,515	—	1,119
1931	41,412	46,358	87,770*	—	—	—	—	—	—
1932	41,850	46,850	88,700*	—	—	—	—	—	—
1933	42,025	47,045	89,070*	—	—	—	—	—	—
1934	42,538	47,619	90,157*	—	—	—	—	—	—
1935	43,124	48,276	91,400*	—	—	—	—	—	—
1936	43,628	48,842	92,470*	—	—	—	—	—	—

* Registrar General's estimates

The Registrar-General estimates that the population of the Borough at the middle of 1936 was 92,470, an increase of 1,070 persons over the previous year.

The sex distribution is based on the assumption that the sexes were distributed in the same proportion as at the Census of 1931

A population of 92,470 at the middle of the year 1936 can be assumed to have risen to 93,000 at the end of the year, a total showing an increase of 5,500 persons since the date of the 1931 Census.

Between January 1st, 1931, and December 31st, 1936, the total number of births ascribed to Ipswich was 8,083 and the number of deaths 6,187, a natural increase of 1,896 persons in 6 years or 316 persons per annum.

The Registrar-General's population estimates, if correct, indicate that the population has increased since 1931 at the average rate of 916 persons per annum. In round figures this means that the average annual population increment at the present moment is made up of one-third natural increase and two-thirds immigration at the expense of some other part of the country. Unfortunately a large proportion of these immigrants

come from the surrounding rural districts of the county, and the majority are young women between the ages of 15 and 30. This feature is no new thing, however. It represents opportunities for female employment in a town as compared with rural districts.

I consider that the increase in our town population, viewed as a whole, is not a healthy sign. It is impossible to contemplate the slow but steady decrease of the population of the countryside without serious misgiving.

I repeat in this Report the Table showing the age composition of each 1,000 of the population of Ipswich, published for the first time in my Report for 1935 :—

Age Composition of each 1,000 of the Population.

Age Periods	1841—1880			1881—1900			1901—1930			1931—1935.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
— 5	139	118	128	125	112	118	100	88	94	84	72	78
—10	118	106	111	119	109	114	103	91	97	85	78	82
—15	111	98	104	115	102	108	98	91	95	84	77	80
—20	96	101	99	102	106	104	93	92	92	85	84	85
—25	86	99	93	84	93	89	80	86	83	80	87	84
—30	76	82	79	76	80	78	79	80	80	83	79	81
—35	66	70	68	69	69	69	74	75	75	73	74	73
—40	60	60	60	60	60	60	69	71	70	66	69	68
—45	54	56	55	53	53	53	64	64	64	65	67	66
—50	45	46	45	44	46	45	57	57	57	65	62	63
—55	41	43	42	40	41	41	49	50	49	59	59	59
—60	29	30	30	31	33	32	40	41	41	52	52	52
—65	27	30	28	27	30	28	31	35	33	41	44	43
—70	19	21	20	21	23	22	25	30	27	31	34	32
—75	13	17	15	15	17	16	15	21	18	21	26	23
—80	8	9	8	8	10	9	9	13	11	11	16	14
—85	3	5	4	4	4	4	4	6	5	5	8	7
+85	1	2	2	1	2	2	2	3	2	2	4	3

M.—Males F.—Females P.—Persons.

This particular Table condenses the information furnished in previous Reports, and brings out prominently the serious trend of modern population movements.

The essential facts are that at the present day the population is being starved at its source by the decline in the birth-rate, whilst at the other end of the scale there is an increasing accumulation of elderly people in consequence of the decline in the mortality experience of young and middle-aged people and the increased expectation of life at all ages. This accumulation of elderly people is the proof of the success of Public Health measures and improvements in the treatment of disease and shows in the clearest possible manner that, in this country at least, we are proceeding along the right lines.

It must be borne in mind, however, that increases in the number of persons at the higher ages mean an increase in the total number of deaths at all ages, because at such ages there is always a heavy mortality experience.

Therefore the older the average age of the population the greater will be the tendency to a rise in the death-rate from the low levels now experienced. This is not a matter for regret, it is but the fulfilment of expectation.

On the other hand the decline in the birth-rate is a matter of the most serious import the profound significance of which has attracted astonishingly little attention so far. When, however, the public does wake up to the realities of the position, it will find itself confronted with a problem of such magnitude as to dwarf all others into insignificance.

The present trend of population movement indicates that about the middle of this century the population of this country will have reached its highest level. Thereafter, it will begin to decline, at first slowly but later at an ever-accelerating rate, which will solve the overcrowding problem without the necessity for amendment of the present overcrowding legislation.

The diminution in the number of births is the factor which is at the moment the most obvious, but there is another the influence of which is not as yet sufficiently apparent to attract the attention of the public but which will play an increasing part in that acceleration of the population decline which has been foretold.

This factor is the actual and, with the passage of time, more and more formidable fact that the number of potential mothers declines *pari passu* with the decline in the number of females born. In illustration, 4,719 female infants were born in the period 1901-1905. Of these, in round figures, 1,000 died before they reached the age of 20, leaving a balance of 3,700 potential mothers.

On the other hand, in the period 1931-1935, 3,310 female infants were born, or 1,400 fewer than in 1901-1905. Of these only about 300 will be dead before they reach the age of 20, if the existing mortality experience is maintained. The net result will be that the female survivors to the age of 20 of this five-yearly period will be 700 fewer than in the first five years of the century.

This illustration will serve to drive home two facts :—

1. The diminution in the number of potential mothers.
2. The lowering of the death-rates amongst young people is no longer sufficient to make good the losses occasioned by the diminution in the number of births.

This century has witnessed enormous declines in Infant Mortality and in the death-rates of young people. There is still room for improvement, but nothing like the room there was, and thus it arises that a continuance of the present birth-rates will inevitably result in the gradual depopulation of the country.

That is the problem awaiting solution.

In broad general terms the diminution in the number of births can be viewed as being due to

(a) Diminished racial fertility, or

(b) Deliberate artificial limitation.

Some people would say that it is more probably a mixture of the two.

There is no question as to the influence of artificial limitation. The fact is so patent and obvious that further consideration would be a mere waste of time. In my opinion, it is *the* cause, which is another way of stating the fact that a large proportion of the potential parents in this country are actively engaged in the promotion of race suicide.

The melancholy feature of this is that the children who are now being born will be left to pay the penalty of their parents' action.

In the opinion of certain people, some of whom should know better, there is diminished racial fertility. The large families of all classes of the people in the Victorian era as compared with the small families of many classes of people to-day, are held to afford evidence in favour of this idea.

It is quite true that the decline in the birth-rate began between 1881 and 1890 and has continued ever since, only much faster of recent years, for reasons already given. This is a matter of about 50 years or so.

We are asked to believe that the qualities of the ovum and the spermatozoid which have been built up through untold millions of years of vicissitude of every description are going to be varied by the experiences of an infinitesimal period of time such as 50 years. In my opinion this view is merely childish nonsense.

It is a simple matter to make sweeping generalisations as to the reasons which have induced such large numbers of people to adopt methods of family limitation, with the result that the birth-rate has been more than halved since the beginning of this century, but such vague generalities get us nowhere.

It is not enough to say that it is the product of parental selfishness, because this is only partly true and, in my opinion, not by any means the chief influence.

Far more important is the feeling of insecurity which dogs the lives of multitudes of people coupled with a consuming desire on the part of most parents that such children as they have shall be better equipped for the struggle for existence than they themselves.

There is to-day no feeling of security, either in the political or the industrial world and it is safe to accept the position that until security returns in both spheres of life there will be no change in the birth-rate.

Insecurity has been the outstanding feature of the political and industrial world throughout the whole of this century and as far back as the industrial depression of the eighties of the last century, when the decline in the birth-rate first began to assume recognisable proportions.

Limitation of family below a certain level is bound to lead ultimately, if persisted in, to the extinction of the race.

This can be illustrated by the consideration of a series of hypothetical populations.

The first is an imaginary population of 100 persons, 50 of each sex. Clearly this population can only found 50 new families. If each one of these families has only one child the second generation will only consist of 50 persons who, in their turn, can only found 25 families who will provide a third generation of 25 individuals. It is needless to carry this further as it is obvious that a few generations sees the end of this population.

In practise no population could reach many generations under these circumstances, as no allowance is made for bachelors and spinsters, sterile marriages or deaths of females before or during the reproductive period of life.

If the same considerations be applied to families limited to two, it is obvious that the natural play of distructive forces will prevent the population from remaining stationary after the hypothetical stationary level has been reached.

It will be conceded by most observers that in the face of the attrition produced by natural loss the minimum number of children per family required to maintain a stationary population, in the absence of immigration, is more than three, but not as many as four.

This conclusion at once assumes a sinister position if we recall to mind that at the Census of 1911, the average number of persons per family was 4.36, in 1921 4.14, and in 1931 only 3.7.

HOUSING.

The Table shows the number of new houses completed in Ipswich since 1921. The total was 9,543 up to the end of 1936, 7,060 by private enterprise and 2,483 by the municipality.

HOUSES ERECTED IN IPSWICH SINCE 1921.

Year.	By Private Enterprise	By the Local Authority under various schemes.	Total.
1921	27	227	254
1922	24	136	160
1923	110	52	162
1924	309	48	357
1925	495	116	611
1926	496	166	662
1927	433	341	774
1928	381	252	633
1929	490	239	729
1930	307	272	579
Annual Average	307	185	492
1931	289	116	405
1932	397	164	561
1933	635	50	685
1934	832	132	964
1935	952	73	1,025
1936	883	99	982
Annual Average	664	106	770

In the same period the number of inhabitants of the Borough increased by 13,100 persons, so that housing accommodation has increased out of proportion to the increase of the population. The result is that the housing position is no longer acute. Whereas, a few years ago, there was not a house to be let in the town, there is now quite a number, a sure sign that the housing requirements of the community are nearing satisfaction.

For the next few years the building activities of the Corporation will be fully absorbed by the needs of the Slum Clearance schemes now in full operation.

I again draw attention to the rise in the housing standards of the people, the inevitable result of the spread of knowledge of the laws of healthy living amongst all sections of the community.

SLUM CLEARANCE.

Three large areas were represented in 1936, viz., St. George's Street 118 houses, Bell Lane 117 houses, and Lower Orwell Street 100 houses.

The Orders sought were confirmed with the exception of one side of Star Lane.

In addition to these, a number of small pockets were represented and dealt with in due course.

All the large slum areas have now been represented with the exception of the Cox Lane and Albion Street areas.

I have referred at different times in these Reports to various aspects of the slum problem apart from the mere declaration of slum areas, such as the hardship experienced by some of the owners, the changing standards of housing requirements, and the exploitation of the public in consequence of the housing shortage.

The latter has been made good and the proof is the number of houses that are now to let. For many years these notices were not to be seen anywhere, a sure indication that there was a shortage of houses.

The old process of stepping from poorer to better housing came to an end with the housing shortage, but it has now begun to resume its sway, apart altogether from the influence of the changing standards of the people. This fact has introduced an additional complication to the problem of providing for the rehousing of the populations of condemned areas. In the days before the present campaign the inhabitants of these properties had to find their own accommodation and did so in the course of time, but when the housing shortage supervened this was no longer possible and the position arose that the tenants of condemned property could not find other accommodation at rents within their means. The alternatives at that time were eviction of the people or toleration of slum conditions. In Ipswich the latter was chosen and, in my opinion, properly so.

The new slum campaign carries with it the obligation on the part of the Corporation to rehouse the tenants of condemned property. This was not a difficult matter to estimate, as the number of new houses required and their size could be determined by the number and size of the families in the condemned area.

The fact that there are now houses to let has altered this position and a good many families are now making their own provision. This is partly due to the fact that suitable accommodation is available, and partly to the determination of quite a number of people not to allow themselves to be transported to the new housing estates on the outskirts of the town. The objection is the distance.

The effect of all this is to render it necessary to correlate these population movements with the building programmes connected with slum clearance so as to avoid redundancy.

At the moment the number of condemned properties is well ahead of the rehousing programme and the number of houses in course of construction is insufficient to meet the needs of the case and further provision will have to be made in due course.

But it can be asserted with confidence that the number of houses required for the rehousing of the slum population will not be as great as originally estimated.

Finally, one further point as to the size of the houses.

The original estimates were based on the size of the families in the condemned areas and the requirement of the Ministry that the houses should be of the size required to accommodate these families and no larger. This meant the construction of an undue number of two-bedroomed houses because the slum population was found not to be representative of the population as a whole.

This discrepancy has now been adjusted and the requirement modified so that the houses now under construction contain a much higher proportion of three-bedroomed houses.

On the other side is the necessity for the provision of more small dwellings suitable for one or two elderly people.

There is a great demand for houses of this type, occasioned by the steadily increasing number of elderly people in the community who have to live on slender means. This demand will tend to increase in the future, because it is no longer the policy to house the older people in the Workhouse. Wherever possible provision should be made so as to render it possible for the older people to live their own lives in homes of their own for as long as possible.

This is a policy which has been adopted in Ipswich with a high degree of success, and with great satisfaction to the people. The only question is as to whether enough has been done in this respect by the Corporation and the Paul Trust.

I think more houses of this type are required.

MARRIAGES.

808 Marriages were registered in Ipswich in 1936

This is one of the highest numbers recorded in the 96 years of our records. It has only been surpassed twice, viz., 898 in 1919 and 856 in 1915, both years of quite abnormal circumstances.

We can say that the number registered in 1936 is the highest of any normal year.

The facts with regard to marriages are tabulated as follows :—

Periods.	No. of Marriages.	Marriage rates per 1000 living.	
		Ipswich.	England & Wales.
1841—1850	2,815	19.43	16 1
1851—1860	3,302	18.70	16.9
1861—1870	3,550	17.64	16.6
1871—1880	4,143	17.77	16 2
1881—1890	4,152	15.37	14.9
1891—1900	4,777	15.43	15 6
1901—1910	5,209	14.86	15 5
1911—1920	6,819	17.83	16.6
1921—1930	6,740	16.20	15 5
1841—1845	1,239	18.29	15 7
1846—1850	1,576	20.42	16.5
1851—1855	1,689	19.84	17.1
1856—1860	1,613	17.65	16.7
1861—1865	1,790	18.35	16.8
1866—1870	1,760	16.96	16 4
1871—1875	2,072	18.56	17.1
1876—1880	2,071	17.04	15 3
1881—1885	2,170	16.59	15.2
1886—1890	1,982	14 22	14.7
1891—1895	2,326	15.60	15.1
1896—1900	2,451	15.28	16.1
1901—1905	2,560	14.99	15 6
1906—1910	2,649	14.73	15.3
1911—1915	3,201	16.94	16.4
1916—1920	3,618	18.70	16.8
1921—1925	3,316	16.34	15.7
1926—1930	3,424	16.06	15.4
1931—1935	3,650	16.32	—
1931	679	15.48	15.6
1932	694	15.72	15.2
1933	713	16.00	15.7
1934	798	17.70	16.9
1935	766	16.76	17 1
1936	808	17.47	—

The highest marriage-rate recorded in Ipswich so far as these records go was 23.1 in 1919, and the lowest 13.0 in 1887.

BIRTHS.

1,378 Births were registered as belonging to Ipswich in 1936 as compared with 1,406 in 1935.

The facts as to the numbers of births and the birth-rates are set forth in the Table :—

Periods	Number.			Rates per 1,000 living	
	Males.	Females.	Persons	Ipswich.	England and Wales.
1841—1850	4,783	4,608	9,391	**32.4**	32 6
1851—1860	6,088	5,837	11,925	**33.7**	34 1
1861—1870	6,805	6,488	13,293	**33.0**	35 2
1871—1880	8,005	7,606	15,611	**33.4**	35 4
1881—1890	8,619	8,485	17,104	**31.6**	32.4
1891—1900	9,058	8,729	17,787	**28 7**	29.9
1901—1910	9,586	9,212	18,798	**26.8**	27.2
1911—1920	8,436	8,102	16,538	**21.6**	21 8
1921—1930	7,602	7,396	14,998	**18.0**	18 3
1841—1845	2,036	2,056	4,092	**30.2**	32.3
1846—1850	2,747	2,552	5,299	**34.3**	32.8
1851—1855	2,914	2,864	5,778	**33.9**	33.9
1856—1860	3,174	2,973	6,147	**33.6**	34.4
1861—1865	3,308	3,144	6,452	**33.0**	35.1
1866—1870	3,497	3,344	6,841	**32.9**	35.3
1871—1875	3,820	3,646	7,466	**33.4**	35.5
1876—1880	4,185	3,960	8,145	**33.5**	35.3
1881—1885	4,258	4,230	8,488	**32.4**	33 5
1886—1890	4,361	4,255	8,616	**30.9**	31.4
1891—1895	4,444	4,339	8,783	**29.4**	30.5
1896—1900	4,614	4,390	9,004	**28.0**	29.3
1901—1905	4,899	4,719	9,618	**28.1**	28.2
1906—1910	4,687	4,493	9,180	**25.5**	26.3
1911—1915	4,481	4,271	8,752	**23.1**	23.6
1916—1920	3,955	3,831	7,786	**20.1**	20.1
1921—1925	3,829	3,883	7,712	**19.0**	19.9
1926—1930	3,773	3,513	7,286	**17.1**	16.7
1931—1935	3,395	3,310	6,705	**14.9**	—
1921	844	880	1,724	**21.7**	22.4
1922	773	813	1,586	**19.7**	20 6
1923	782	766	1,548	**19.1**	19 7
1924	735	698	1,433	**17.5**	18.8
1925	695	726	1,421	**17.1**	18.3
1926	777	763	1,540	**18.4**	17 8
1927	729	687	1,416	**16.8**	16.7
1928	768	656	1,424	**16.7**	16 7
1929	725	713	1,438	**16.7**	16.3
1930	774	694	1,468	**16.9**	16 3
1931	702	669	1,371	**15.6**	15.8
1932	671	692	1,363	**15.4**	15.3
1933	660	614	1,274	**14.3**	14 4
1934	657	634	1,291	**14.3**	14 8
1935	705	701	1,406	**15.3**	14 7
1936	701	677	1,378	**14.9**	14 8

Thus the birth-rate in 1936 was equal to the average of the preceding five years but was the third lowest in the 96 years of our records.

The decline in the birth-rate in this country began in the eighties of the last century. At first it was slight and passed unnoticed except by a few.

Later on a good deal of attention was given to the subject, but it is only within a comparatively recent period that the perilous momentum reached by the process has begun to be realised dimly by the public.

If the average birth-rate of the period 1871-1880 be taken as 1,000, then the comparative birth-rate figures for the following five decennial periods and the latest quinquennium are as follows :—

Periods.	Comparative Birth-Rates.
1871—1880	1,000
1881—1890	946
1891—1900	859
1901—1910	802
1911—1920	646
1921—1930	538
1931—1935	446

Thus the birth-rate has been more than halved in the short period covered by this Table.

It is obvious also that the speed of the decline is accelerating, and that there is, in this Table, no indication that the process has come to an end.

In the first five years of this century 9,618 infants were born in Ipswich. In 1931-1935 the number of births dropped to 6,705, or 2,913 fewer than in 1901-1905, about half of whom were females.

When people talk about the declining birth-rate they more often than not lose sight of one of the most vital aspects of the case.

This is the decline in the number of future potential mothers. It has been shown that in the last five years there has been a decline of more than 1,400 female births as compared with the first five years of the century.

Under existing conditions of mortality experience about 300 of these will not survive to the age of 20 so that the number of female potential mothers may be put at about 1,100 fewer at the present time than would have been the case if the birth-rate in 1931-1935 had been the same as in 1901-1905.

The foundation of a family depends on the woman and any decrease in the number of women means a decrease in the number of families and, in consequence, the number of descendants.

It is this factor which is now giving momentum to the declining birth-rate.

In putting the case one does not forget that 1,000,000 men were killed in the war, and that the decline in the number of male infants is as great as in the case of females.

All these factors decrease the number of families.

When, in addition, the number of children per family is deliberately restricted on the scale prevailing at the present day, it does not require a statistician to demonstrate the slippery nature of the slope down which the birth-rate will precipitate the population in the near future.

Birth control has got out of control, but the public does not yet realise the position, because there is still an increase of population going on which conceals the true position.

A little thought will show that in such a case there must be a considerable time lag before the results of a declining birth-rate begin to show themselves in the form of an actual decline in population numbers. At least two generations must elapse under existing conditions of death-rates and longevity before the population advantages of lowered death-rates and increased expectation of life are swallowed up by the declining birth-rate.

That time is now close at hand and the considerations already advanced as to the behaviour of the birth-rate and its effect upon the future of the population indicate that once the stage of stabilisation has been reached the decline in the population will proceed at an ever-accelerating pace.

We have seen how slowly the declining birth-rate has affected the total population numbers and we can learn from that fact the length of time required to rebuild a population by increasing the birth-rate. Generations must elapse in such a process and history appears to indicate that populations that have arrived at such a pass do not get the opportunity to recover.

ANNUAL NUMBER, SEX AND LEGITIMACY OF THE BIRTHS.

The local experience since 1921 is shown thus :—

Year.	Legitimate.			Illegitimate.			All Births			Males per 1,000 Females
	M.	F.	P.	M.	F.	P.	M.	F.	P.	
1921	808	831	1,639	36	49	85	844	880	1 724	959
1922	731	777	1 508	42	36	78	773	813	1,586	958
1923	754	733	1,487	28	33	61	782	766	1,548	1,021
1924	700	669	1,369	35	29	64	735	698	1,433	1,053
1925	661	695	1,356	34	31	65	695	726	1,421	957
1926	748	735	1,483	29	28	57	777	763	1,540	1,018
1927	689	665	1,354	40	22	62	729	687	1,416	1,061
1928	736	625	1,361	32	31	63	768	656	1,424	1,170
1929	694	678	1,372	31	35	66	725	713	1,438	1,017
1930	742	669	1,411	32	25	57	774	694	1,468	1,115
1921-1930	7,263	7,077	14,340	339	319	658	7,602	7,396	14,998	1,028
1931	668	635	1,303	34	34	68	702	669	1,371	1,049
1932	641	656	1,297	30	36	66	671	692	1,363	969
1933	625	581	1,206	35	33	68	660	614	1,274	1,075
1934	632	599	1,231	25	35	60	657	634	1,291	1,036
1935	672	664	1,336	33	37	70	705	701	1,406	1,005
1936	677	645	1,322	24	32	56	701	677	1,378	1,035

TWIN BIRTHS.

15 Twin Pregnancies occurred in Ipswich in 1936, resulting in the birth of 28 living infants and 2 stillbirths.

9 pregnancies resulted in twin males, 3 in twin females and 3 in mixed twins.

The proportion of stillborn twins was 6.66%, a figure well below the average of the period 1921-1935, viz., 11.9%.

The local twin records show that in the period 1921-1936 inclusive there have been 283 twin pregnancies or about 18 per annum. These have resulted in the birth of 504 living children and 62 stillbirths or 89.05% of living children and 10.95% of dead.

16.9% of these twin pregnancies produced stillborn infants, one or both.

These figures are very high when compared with the experience of single infants.

The proportion of twin to single births was 2.6%, which is about the local average.

DEATHS AND DEATH-RATES FROM ALL CAUSES AT ALL AGES.

I give a Table showing the crude death-rates, decennial and quinquennial, since 1841, and annual since 1921, recorded for Ipswich, and compared with the corresponding rates for England and Wales :—

Periods	No. of Deaths (Ipswich).			Crude Death-rates per 1000 living					
				Males.		Females.		Persons.	
	M.	F.	P.	Ipswich	E. & W.	Ipswich	E. & W.	Ipswich	E. & W.
1841–1850	3,245	3,324	6,569	23.86	23.1	21.62	21.6	22.67	22.4
1851–1860	3,863	3,987	7,850	23.39	23.1	21.22	21.4	22.24	22.2
1861–1870	4,440	4,480	8,920	23.66	23.7	20.84	21.4	22.16	22.5
1871–1880	5,273	5,044	10,317	24.15	22.7	20.34	20.1	22.12	21.4
1881–1890	5,053	5,016	10,069	20.02	20.3	17.43	18.1	18.64	19.1
1891–1900	5,649	5,529	11,178	19.56	19.3	16.74	17.1	18.06	18.2
1901–1910	5,335	5,231	10,566	16.17	16.4	14.09	14.4	15.07	15.4
1911–1920	5,270	5,283	10,553	14.56	15.9	13.10	13.0	13.19	14.3
1921–1930	4,604	4,778	9,382	11.76	12.9	10.88	11.4	11.29	12.1
1841–1845	1,402	1,417	2,819	22.07	22.1	19.70	20.6	20.81	21.4
1846–1850	1,843	1,907	3,750	25.43	24.1	23.43	22.6	24.30	23.3
1851–1855	1,989	1,971	3,960	24.90	23.5	21.80	21.8	23.26	22.7
1856–1860	1,874	2,016	3,890	21.97	22.6	20.69	21.0	21.29	21.8
1861–1865	2,235	2,314	4,549	24.59	23.7	22.21	21.5	23.32	22.6
1866–1870	2,205	2,166	4,371	22.79	23.7	19.56	21.2	21.07	22.4
1871–1875	2,586	2,440	5,026	24.78	23.3	20.52	20.7	22.51	22.0
1876–1880	2,687	2,604	5,291	23.58	22.1	20.16	19.5	21.76	20.8
1881–1885	2,496	2,505	5,001	20.37	20.5	18.01	18.3	19.12	19.4
1886–1890	2,557	2,511	5,068	19.69	20.0	16.88	17.8	18.19	18.9
1891–1895	2,841	2,760	5,601	20.46	19.8	17.32	17.7	18.78	18.7
1896–1900	2,808	2,769	5,577	18.73	18.8	16.20	16.6	17.38	17.7
1901–1905	2,692	2,636	5,328	16.80	17.1	14.55	15.0	15.60	16.0
1906–1910	2,643	2,595	5,238	15.57	15.6	13.66	13.8	14.56	14.7
1911–1915	2,765	2,597	5,362	15.43	15.4	13.06	13.2	14.19	14.3
1916–1920	2,505	2,686	5,191	13.71	16.5	13.14	12.8	13.41	14.4
1921–1925	2,200	2,330	4,530	11.53	13.0	10.87	11.4	11.18	12.2
1926–1930	2,404	2,448	4,852	11.98	12.9	10.89	11.4	11.40	12.1
1931–1935	2,426	2,648	5,074	11.50	12.7	11.21	11.4	11.34	12.0
1921	432	459	891	11.56	13.0	10.92	11.3	11.22	12.1
1922	448	526	974	11.86	13.6	12.39	12.0	12.14	12.8
1923	411	427	838	10.77	12.4	9.96	10.9	10.34	11.6
1924	398	403	801	10.32	12.9	9.31	11.5	9.79	12.2
1925	511	515	1,026	13.12	12.9	11.78	11.4	12.41	12.2
1926	440	429	869	11.18	12.4	9.72	10.9	10.41	11.6
1927	516	544	1,060	12.99	13.1	12.21	11.6	12.58	12.3
1928	481	479	960	11.99	12.5	10.65	10.9	11.28	11.7
1929	505	545	1,050	12.46	14.2	12.01	12.7	12.22	13.4
1930	462	451	913	11.29	12.3	9.84	10.7	10.53	11.4
1931	487	542	1,029	11.76	13.0	11.71	11.6	11.73	12.3
1932	495	573	1,068	11.88	12.7	12.33	11.4	12.12	12.0
1933	487	532	1,019	11.58	12.9	11.30	11.7	11.44	12.3
1934	478	505	983	11.23	12.5	10.60	11.1	10.90	11.8
1935	479	496	975	11.10	12.5	10.27	11.1	10.66	11.7
1936	533	580	1,113	12.216		11.875		12.03	12.1

The number of deaths registered in 1936 was the highest since 1918, the year of the last great influenza epidemic. It was also one of the highest in the 96 years of our records. It was surpassed on 6 occasions in the 19th century (5 of these in the period 1891-1900) and on 4 occasions in this century.

The death-rate rose to 12.03, which was above the average of the last 15 years, but below that of the period 1916-1920, and, of course, of all preceding averages.

The sex death-rates show the usual higher death-rates for males and the tendency for the two rates to continue their approach to one another. A reference to the quinquennial death-rates will show that this latter point has been a prominent feature of the average death-rates of the last 20 years. The same part of the Table shows that it is the more rapid decline in the male death-rate since the beginning of this century which has played the chief part in bringing about the approximation of the sex death-rates. Special attention is drawn to this feature.

The highest death-rates recorded in the 96 years of our series were 27.68 in 1863, 26.95 in 1846, 26.76 in 1849, and 25.92 in 1854.

The lowest were 9.79 in 1924, 10.34 in 1923, 10.41 in 1926, and 10.53 in 1930.

In previous reports I have drawn attention to certain fallacies inherent in all such mass statistics. I refer once more to the disturbing effect of the age distribution of the population upon death-rates referring to the population at all ages.

In consequence of this, the Table we are now considering must be viewed in relation to the age distribution of the death-rates, which is set forth on page 27 of this Report. In this way only can a correct appreciation of the position be arrived at.

A little consideration will show that, as the population includes greater and greater numbers of people arriving at the higher ages and increased longevity amongst those at these ages, there must inevitably arrive a time at which the number of deaths of these persons of mature age must rise automatically and exert a correspondingly determining influence upon the mortality rates applying to persons at all ages. That time is here now as is evidenced by the fact that 43.8% of the deaths at all ages in 1936 were of persons of 70 years of age and over.

Decennial age distribution of the death-rates of persons per million living

Ages.	1841—1850.	1851—1860.	1861—1870	1871—1880	1881—1890	1891—1900.	1901—1910	1911—1920	1921—1930.	1931—1935	1936
— 5	73,231	69,264	67,157	63,013	55,963	55,317	44,006	31,811	17,207	11,826	11,573
— 10	9,210	6,503	7,666	5,839	4,389	4,589	3,618	3,784	2,150	2,290	1,977
— 15	5,115	3,779	4,877	3,501	3,087	2,481	1,925	2,438	1,314	1,331	1,341
— 20	7,371	6,808	6,255	5,396	4,139	4,105	2,585	2,954	1,977	1,735	1,525
— 25	8,728	8,590	8,467	6,821	5,623	4,708	3,920	4,237	2,913	2,468	2,309
— 30	11,080	9,408	8,919	9,821	6,466	6,080	4,012	4,768	3,034	2,887	2,127
— 35	10,401	11,350	9,703	10,759	7,905	6,833	5,644	5,231	3,597	2,692	3,364
— 40	13,553	12,003	12,679	13,672	9,636	9,823	6,968	6,277	4,159	3,351	4,130
— 45	14,221	12,571	12,879	13,840	11,844	10,756	8,906	7,761	5,931	4,460	4,248
— 50	15,204	16,423	16,907	17,648	13,298	13,916	12,076	9,786	7,850	6,580	7,145
— 55	15,822	17,941	18,117	20,263	15,885	17,340	13,733	13,090	10,724	10,054	9,832
— 60	26,405	25,809	25,083	28,208	24,209	23,510	20,971	18,812	14,403	15,326	16,718
— 65	32,215	34,516	33,177	35,147	31,839	31,718	28,301	26,058	21,854	21,377	26,156
— 70	46,594	54,208	51,754	54,651	54,993	53,553	39,489	43,228	35,340	37,494	37,377
— 75	81,429	67,324	59,694	75,653	74,595	73,151	73,039	64,074	59,050	57,701	65,099
— 80	115,122	116,137	122,225	136,449	114,770	126,582	110,158	102,907	93,126	103,764	110,526
— 85	177,121	169,137	170,212	174,450	168,780	174,921	158,938	157,321	148,959	160,719	163,418
+ 85	290,209	324,030	283,783	333,333	309,426	263,544	245,378	249,051	264,063	252,801	298,305
All Ages	22,676	22,241	22,162	22,127	18,642	18,061	15,074	13,799	11,299	11,348	12,036

The experience of the year 1936, therefore, indicates that the higher death-rate of the year was not due to increase of mortality at the younger ages but to heavier mortality rates amongst elderly people.

So far as the younger ages were concerned, the mortalities for the year at several age periods constituted new low rate records.

I have indicated repeatedly that increases of the death-rates at all ages may be expected on account of the large number of elderly people in the population.

DEATHS AND DEATH-RATES OVER 70 YEARS OF AGE.

Deaths and death-rates of elderly people become of increasing importance year by year on account of the ageing of the population and the decline in the death-rates at the younger ages.

I give a Table showing in decennial and quinquennial periods the deaths, death-rates and proportions of the deaths at all ages, of people over 70 years for the 96 years of our records.

Periods.	Deaths and Death-rates over 70 years of age.								
	Deaths.			Death-rates.			Proportions of Total Deaths at all ages.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.
1841-1850	427	537	964	122.000	116.133	118.660	13.15	16.15	14.67
1851-1860	513	657	1,170	118.012	108.272	112.337	13.27	16.47	14.90
1861-1870	626	773	1,399	118.269	100.520	107.756	14.09	17.25	15.68
1871-1880	801	1,045	1,846	131.462	119.414	124.360	15.19	20.71	17.89
1881-1890	849	1,046	1,895	121.130	106.712	112.723	16.80	20.85	18.78
1891-1900	983	1,301	2,284	116.427	111.587	113.620	17.40	23.53	20.43
1901-1910	1,130	1,463	2,593	116.004	104.002	108.912	21.18	27.96	24.54
1911-1920	1,268	1,702	2,970	114.637	96.452	103.459	24.06	32.21	28.14
1921-1930	1,477	2,045	3,522	104.182	90.820	95.982	32.08	42.80	37.53
1841-1845	195	253	448	120.000	119.114	119.498	13.90	17.85	15.96
1846-1850	232	284	516	123.733	113.600	117.942	12.58	14.89	13.76
1851-1855	260	314	574	125.120	109.943	116.335	13.07	15.93	14.49
1856-1860	253	343	596	111.502	106.787	108.739	13.50	17.01	15.32
1861-1865	310	369	679	123.950	102.357	111.202	13.87	15.94	14.92
1866-1870	316	404	720	113.180	98.898	104.696	14.33	18.65	16.47
1871-1875	414	515	929	138.322	118.227	126.411	16.00	21.10	18.48
1876-1880	387	530	917	124.838	120.591	122.348	14.40	20.35	17.33
1881-1885	414	497	911	124.736	107.250	114.547	16.58	19.84	18.21
1886-1890	435	549	984	117.886	106.230	111.086	17.01	21.86	19.41
1891-1895	470	637	1,107	116.192	112.963	114.312	16 54	23.07	19.76
1896-1900	513	664	1,177	116.643	110.299	112.977	18.26	23.97	21.10
1901-1905	529	665	1,194	111.933	100.590	105.318	19.65	25.22	22.40
1906-1910	601	798	1,399	119.840	107.027	112.180	22.73	30.75	26.70
1911-1915	656	838	1,494	122.800	100.407	109.146	23.72	32.26	27.86
1916-1920	612	864	1,476	107.011	92.903	98.275	24.43	32.16	28.43
1921-1925	651	970	1,621	100.540	92.345	95.468	29.59	41.63	35.78
1926-1930	826	1,075	1,901	107.244	89.486	96.424	34.35	43.91	39.17
1931-1935	956	1,197	2,153	111.085	90.916	98.916	39.40	45.20	42.43
1936	233	255	488	130.825	93.646	108.348	43.63	44.04	43.84

M.—Males F.—Females P.—Persons

Thus there is a diminution in the general death-rate of persons over 70, due to prolongation of life well beyond the 70 mark.

Of particular importance is the high proportion of deaths of aged persons to deaths at all ages.

At the present rate it will not be many years before it will be possible to record that 50% of the deaths are of persons who have passed the allotted span.

CAUSES OF DEATH OVER 70 YEARS OF AGE, 1936.

Causes of Death.	Males.	Females.	Persons.	
			Nos.	Death-rates per 1,000 living.
Heart Diseases	71	75	146	32.41
Cancer	40	38	78	17.31
Bronchitis	31	40	71	15.76
Cerebral Hæmorrhage, etc.	15	24	39	8.65
Pneumonia	12	13	25	5.55
Bright's Disease ...	9	12	21	4.66
Senility	5	13	18	3.99
Arterio Sclerosis ...	9	8	17	3.77
Diseases of Prostate ...	11	—	11	2.44
All others	30	32	62	13.76
All Causes	233	255	488	
Death-rates over 70 years of age	130.82	93.64	108.34	

Similar Tables have been given in previous reports, and the point that impresses one chiefly is the constancy of the groups of causes and their arrangement relatively to one another.

The diseases concerned are the degeneration groups, such as Heart Diseases, Cerebral Hæmorrhage, Arterio Sclerosis, Bronchitis, and so on, together with Cancer.

In view of the increasing part played by the aged in the production of the death-rates at all ages, I give a table showing the age distribution of the average death-rates at ages of 70 years and over.

Periods.	70—74			75—79			80—84			85 and over.		
	M	F	P	M	F	P	M	F	P	M	F	P
1841—1880	78.80	64 33	70 33	126.72	121 89	124 05	201 03	155 20	172 49	319 92	303 98	309 66
1881—1900	79 03	69.81	73 81	131.88	113.54	121.20	179.12	167.37	172 20	333.86	263 78	285.22
1901—1910	79 25	68 76	73.03	117.26	105 20	110.158	161 11	157 27	158.93	276 67	228 34	245 37
1911—1920	74 99	57 11	64 07	117.92	93.46	102 90	164 46	152.99	157.32	265 22	239 39	249.05
1921—1930	70 05	51.54	59 05	104.46	86.25	93.12	156 40	144 63	148.95	284 25	254.21	264.06
1931—1935	69 81	49 00	57.70	122.48	91.99	103.76	186,32	146.12	160 71	251 54	253 44	252.80
1936	82 16	52 83	65 09	145.91	88.23	110.52	198.34	143.52	163.41	340 00	276 92	298.30

The broad general fact is disclosed that, as compared with the experience of the last century, there have been appreciable declines in the death-rates at all ages over 70 years during the present century, especially in the case of females.

These mortality declines represent increased longevity amongst those attaining these high ages.

THE PRINCIPAL CAUSES OF DEATH AT ALL AGES, 1936.

Causes of Death.	Males.		Females.		Persons.	
	No.	Death-rates.	No	Death-rates.	No.	Death rates
Heart Diseases	110	2 52	116	2 37	226	2 44
Cancer	86	1 97	98	2 00	184	1 98
Bronchitis	40	91	56	1 14	96	1 03
Pneumonia	43	98	39	79	82	.88
Cerebral Hæmorrhage etc	26	.59	43	88	69	.74
Tuberculosis	33	.75	27	.55	60	.64
Violence	32	73	13	26	45	.48
Bright's Disease	18	41	21	.42	39	.42
Arterio Sclerosis	17	38	17	.34	34	.36
Prematurity	19	43	4	08	23	24
Senility	5	.11	13	.26	18	.19
Influenza	8	.18	8	.16	16	17
All Others Causes	96	2 20	125	2 55	221	2 38
Total all Causes	533	12 21	580	11 87	1,113	12.03

There is but little change in the arrangement of the causes of death from the averages of recent years.

The list is always headed by Heart Diseases, Cancer and Bronchitis in the order given.

Tuberculosis tends to fall further down the Table and Arterio Sclerosis and Cerebral Hæmorrhage to rise.

Senility is one of the receding causes of death because nowadays it is seldom given as the sole cause of death. For practical purposes it is merged in the group of Heart Diseases, the certificate being commonly Myocardial Degeneration and Senility.

SEASONAL MORTALITIES (PERSONS).

I give a Table showing the average monthly mortality experiences for a period covering our 96 years' records.

Month	1841—1880	1881—1900.	1901—1910	1911—1920.	1921—1930.	1931—1935.	1935	1936.
January	24 02	21.52	18.64	15.81	15.60	12.59	10.30	14.55
February	24.21	20.37	18.19	19 22	15.23	15.61	12.55	12.82
March	23.40	21 49	16 74	16.61	13.70	14.72	12.23	15.83
April	21.88	18.36	14 95	14.34	11.70	11.32	12.11	13 32
May	20.95	16.33	14.16	12.86	9.98	10.25	11.85	11 23
June	19.25	14.89	12.29	11.32	9.61	11 05	10.91	12.00
July	18.00	15.15	11.96	10.57	9.03	9.43	9.40	9.19
August	23.11	19.08	14.01	11.43	8.80	9.61	9.53	9.83
September	25.66	18.95	14 64	12.01	8.61	9.03	8.65	9.89
October	21.59	17 12	13.66	12.13	10.06	9.45	9.92	11.74
November	21 17	17.37	15.28	16.08	10.84	10.59	8.91	8 70
December	24.05	20.45	16.50	13.65	12.48	12 72	11.72	15.19
Whole Year	22 27	18.33	15.00	13.80	11.27	11.34	10.66	12.03

The general facts of this Table have been fully explained in previous reports so that it only remains to refer briefly to 1936.

The highest mortalities were experienced in March, December, January and April.

This is a somewhat unusual order, as the Table shows.

The lowest mortalities occurred in November, July, August and September. This also is unusual, especially the November figure. The other three are in accordance with expectation.

QUARTERLY DEATH-RATES (PERSONS).

Decennial Periods.	March. Death-rates.		June. Death-rates.		September Death-rates.		December. Death-rates.	
	Ipswich	England & Wales.	Ipswich	England & Wales.	Ipswich	England & Wales.	Ipswich	England & Wales.
1841—1850	24.05	24 7	21.12	22.0	23.09	21.0	22.44	21.7
1851—1860	23.61	24 7	20.56	22 1	22.34	20.3	22.45	21 9
1861—1870	23.84	25 2	20.38	21.8	22.18	21.0	22.26	22 1
1871—1880	24.05	23 7	20.81	20.9	21.60	19.6	22.07	21.3
1881—1890	20.92	21.6	17.15	18.7	17.18	17.3	19.29	19 1
1891—1900	20.69	20 7	15.99	17.6	18.17	17.0	17.41	17.7
1901—1910	17.84	17.7	13.89	14.6	13.53	13 8	15.15	15 4
1911—1920	17.15	17.2	12.84	13.6	11.32	11.8	13.93	15.0
1921—1930	14.83	15 5	10.42	11.7	8.82	9.5	11.12	11.8
1931	16.10	16 5	10.93	11 5	9.41	9.6	10.54	11 7
1932	17.10	15.4	10.23	11.6	9.45	9.7	11.56	11 5
1933	13.52	17 1	10.76	10 8	9.75	9.4	11.75	12 0
1934	13.13	14 6	10.88	11.8	9.31	9.6	10.84	11.2
1935	11.67	13.2	11.62	12.0	9.20	9 8	10.20	12.0
1936	14.44	—	12.17	—	9.63	—	11.91	—

The notable feature of the 1936 figures is that, with the exception of the March quarter, all the quarterly mortalities were above the average of the period 1921-1930.

As usual, mortality was lowest in the September quarter and highest in the March, but it is not expected that the death-rate of the June quarter should be higher than the December.

The cause of the increases was the high proportion of elderly people dying throughout the year.

MORTALITY FROM THE SEVEN PRINCIPAL ZYMOTIC DISEASES.

The group includes Enteric Fever, Smallpox, Scarlet Fever, Diphtheria, Measles, Whooping Cough and Diarrhœa under 2 years of age

Periods	Males		Females		Persons	
	Nos.	Rates	Nos.	Rates	Nos.	Rates
1841—1850	401	2 94	383	2.49	784	2 70
1851—1860	438	2 65	471	2.50	909	2.57
1861—1870	523	2 78	539	2 50	1062	2 63
1871—1880	737	3.37	688	2.77	1425	3 05
1881—1890	514	2 03	528	1 83	1042	1 92
1891—1900	740	2 56	685	2.07	1425	2.30
1901—1910	486	1.47	443	1 19	929	1 32
1911—1920	347	.95	291	.72	638	.83
1921—1930	130	.33	120	.27	250	.30
1841—1845	121	1 90	103	1.43	222	1 65
1846—1850	280	3.86	280	3 42	562	3 63
1851—1855	229	2.86	249	2.75	478	2.80
1856—1860	209	2.45	222	2.27	431	2.36
1861—1865	309	3.40	340	3.26	649	3 32
1866—1870	214	2.21	199	1 79	413	1 99
1871—1875	389	3.72	339	2.85	728	3.26
1876—1880	348	3.05	349	2.70	697	2 86
1881—1885	215	1.75	253	1.81	468	1.78
1886—1890	299	2.30	275	1.84	574	2.06
1891—1895	321	2.31	304	1.90	625	2.09
1896—1900	419	2.79	381	2.22	800	2 49
1901—1905	280	1.74	244	1.34	524	1 53
1906—1910	206	1.21	199	1.04	405	1.12
1911—1915	230	1 28	193	.97	423	1.11
1916—1920	117	.64	98	.47	215	55
1921—1925	65	.34	71	.33	136	.33
1926—1930	65	.32	49	.21	114	.26
1931—1935	50	.23	46	.19	96	.21
1931	17	.40	25	.54	42	47
1932	13	.31	7	.15	20	.22
1933	6	.14	7	.14	13	14
1934	10	.23	7	.14	17	18
1935	4	.09	—		4	.04
1936	5	.11	11	.22	16	17

The 16 deaths ascribed to this group in 1936 included 2 from Diarrhœa, 3 from Measles, 5 from Whooping Cough, and 6 from Diphtheria, but none from Scarlet Fever, Enteric Fever or Smallpox.

The number of deaths from this group in 1936 was one of the lowest recorded in the 96 years of our series. It has only been bettered on 5 occasions since 1841, viz., 4 deaths in 1935 10 in 1923, and 13 each in 1924, 1926 and 1933.

On the other hand, the greatest annual numbers of deaths referred to this group in our series were 307 in 1863 (Scarlet Fever 198), 241 in 1872 (Smallpox 147), 215 in 1898 (Diarrhœa 139), and 212 in 1895 (Diarrhœa 123).

In this century mortalities of over 100 per annum were recorded as follows: 140 in 1901 (Diarrhœa 63, Whooping Cough 35), 118 in 1904 (Diarrhœa 73), 111 in 1912 (Measles 51, Whooping Cough 34), and 105 in 1903 (Measles 48, Diarrhœa 29).

These facts emphasise the remarkable nature of the present experience of Zymotic mortality. This group alone accounts for a large proportion of the decline in the death-rate under 5 years of age.

DEATHS AND DEATH-RATES FROM SCARLET FEVER.

There were no deaths from Scarlet Fever in 1936.

Table showing the deaths and death-rates at all ages from Scarlet Fever:—

Periods	Males.		Females.		Persons.	
	No.	Rate.	No.	Rate.	No.	Rate.
1841—1850	53	.38	67	.43	120	41
1851—1860	56	.33	64	34	120	.33
1861—1870	153	.81	151	70	304	75
1871—1880	101	46	99	.39	200	42
1881—1890	18	.07	20	.06	38	.07
1891—1900	21	07	31	.09	52	.08
1901—1910	4	.01	11	.02	15	.02
1911—1920	26	.07	18	.04	44	05
1921—1930	3	.007	6	.01	9	01
1841—1845	16	.25	20	.27	36	26
1846—1850	37	.51	47	.57	84	.54
1851—1855	27	.33	39	.43	66	.38
1856—1860	29	.34	25	.25	54	29
1861—1865	115	1.26	118	1.13	233	1.19
1866—1870	38	.39	33	.29	71	34
1871—1875	59	.56	43	.36	102	45
1876—1880	42	.36	56	.43	98	.40
1881—1885	16	.13	20	.14	36	13
1886—1890	2	.01	—	—	2	00
1891—1895	19	.13	18	.11	37	.12
1896—1900	2	.01	13	.07	15	04
1901—1905	1	00	5	02	6	01
1906—1910	3	.01	6	03	9	02
1911—1915	23	12	15	07	38	.10
1916—1920	3	01	3	.01	6	01
1921—1925	1	.00	5	02	6	01
1926—1930	2	01	1	00	3	00
1931—1935	1	.00	4	04	5	01
1931	—	—	3	06	3	.03
1932	—	—	1	02	1	01
1933	—	—	—	—	—	—
1934	—	—	—	—	—	—
1935	1	.02	—	—	1	.01
1936	—	—	—	—	—	—

Scarlet Fever mortality is, at the present time, as low as it has ever been in the history of the Borough.

It is not due to diminution in the number of cases of the disease but to mildness of type.

DEATHS AND DEATH-RATES FROM DIPHTHERIA.

6 deaths were referred to Diphtheria in 1936.

The following Table shows the behaviour of the Diphtheria death-rates at all ages since 1841 :—

Periods.	Males.		Females.		Persons.	
	No.	Rate.	No.	Rate.	No.	Rate.
1841—1850	19	.13	16	.10	35	.12
1851—1860	23	.13	27	.14	50	.14
1861—1870	43	.22	57	.26	100	.24
1871—1880	56	.25	53	.21	109	.23
1881—1890	77	.30	91	.31	168	.31
1891—1900	72	.24	85	.25	157	.25
1901—1910	57	.17	45	.12	102	.14
1911—1920	69	.19	58	.14	127	.16
1921—1930	27	.06	25	.05	52	.06
1841—1845	7	.10	7	.09	14	·10
1846—1850	12	.16	9	.10	21	·13
1851—1855	7	.08	5	.05	12	·07
1856—1860	16	.18	22	.22	38	·20
1861—1865	24	.26	48	.46	72	·36
1866—1870	19	.19	9	.08	28	·13
1871—1875	15	.14	17	.14	32	·14
1876—1880	41	.35	36	.27	77	·31
1881—1885	20	.16	27	.19	47	·17
1886—1890	57	.43	64	.43	121	·43
1891—1895	51	.36	52	.32	103	·34
1896—1900	21	.14	33	.19	54	·16
1901—1905	30	.18	28	.15	58	·16
1906—1910	27	.15	17	.09	44	·12
1911—1915	35	.19	24	.12	59	·15
1916—1920	34	.18	34	.16	68	·17
1921—1925	9	.04	16	.07	25	.06
1926—1930	18	.08	9	.04	27	.06
1931—1935	26	.12	25	.10	51	.11
1926	3	.07	—	—	3	.03
1927	1	.02	—	—	1	.01
1928	3	.07	1	.02	4	.04
1929	6	.14	5	.11	11	.12
1930	5	.12	3	.06	8	.09
1931	13	.31	11	.23	24	.27
1932	7	.16	5	.10	12	.13
1933	2	.04	5	.10	7	.07
1934	2	.04	4	.08	6	.06
1935	2	.04	—	—	2	.02
1936	3	.06	3	.06	6	.06

Thus the toll of Diphtheria is much higher than Scarlet Fever. This again is a question of type. The existing type appeared in 1928 after several years of low prevalence. It reached its maximum virulence in 1931, since when it has declined in general severity although severe cases still occur.

DEATHS AND DEATH-RATES FROM WHOOPING COUGH.

There were 5 deaths from Whooping Cough in 1936.

Table showing the deaths and death-rates from Whooping Cough since 1841 :—

Periods	Males.		Females.		Persons.	
	No.	Rates.	No.	Rates.	No.	Rates.
1841—1850	76	.55	89	.57	165	.56
1851—1860	66	.39	98	.52	164	.46
1861—1870	82	.43	97	.45	179	.44
1871—1880	126	.57	139	.56	265	.56
1881—1890	110	.43	138	.47	248	.45
1891—1900	98	.33	102	.30	200	.32
1901—1910	75	.22	92	.24	167	.23
1911—1920	64	.17	73	.18	137	.17
1921—1930	33	.08	39	.08	72	.08
1841—1845	31	.48	32	.44	63	.46
1846—1850	45	.62	57	.69	102	.66
1851—1855	26	.32	53	.58	79	.46
1856—1860	40	.46	45	.46	85	.46
1861—1865	33	.36	37	.35	70	.35
1866—1870	49	.50	60	.54	109	.52
1871—1875	60	.57	60	.50	120	.53
1876—1880	66	.57	79	.61	145	.59
1881—1885	44	.35	76	.54	120	.45
1886—1890	66	.50	62	.41	128	.45
1891—1895	52	.37	50	.31	102	.34
1896—1900	46	.30	52	.30	98	.30
1901—1905	45	.28	45	.24	90	.26
1906—1910	30	.17	47	.24	77	.21
1911—1915	39	.21	43	.21	82	.21
1916—1920	25	.13	30	.14	55	.14
1921—1925	17	.09	21	.09	38	.09
1926—1930	16	.07	18	.08	34	.08
1931—1935	10	.04	9	.03	19	.04
1931	—	—	7	.15	7	.07
1932	2	.04	—	—	2	.02
1933	2	.04	1	.02	3	.03
1934	6	.14	1	.02	7	.07
1935	—		—		—	
1936	1	.02	4	.08	5	.05

The fatality of Whooping Cough is at the present far below anything recorded in our 96 years of statistics.

The probable causes of this state of affairs have been discussed in previous reports, but I wish once again to point out the effects of the constant work of the Health Visitors in spreading knowledge amongst the people of what to do with a case of Whooping Cough when it occurs. This has had a great effect in preventing the complications which are the cause of most of the Whooping Cough deaths.

MEASLES.

Three deaths were referred to Measles in 1936.

The facts with regard to Measles Mortality are set forth in the Table :—

Periods.	Males.		Females.		Persons.	
	No.	Rates.	No.	Rates.	No.	Rates.
1841—1850	52	.38	35	.22	87	.30
1851—1860	39	.23	32	17	71	.20
1861—1870	38	.19	36	.16	74	.18
1871—1880	43	.19	36	.14	79	16
1881—1890	103	.40	93	.32	196	36
1891—1900	102	.35	79	.22	181	.29
1901—1910	103	.31	90	.24	193	.27
1911—1920	70	.19	52	.12	122	.15
1921—1930	26	.06	21	04	47	.05
1841—1845	29	.45	12	.16	41	.30
1846—1850	23	.31	23	.28	46	.29
1851—1855	21	.26	15	.16	36	.21
1856—1860	18	.21	17	.17	35	.19
1861—1865	27	.29	26	.24	53	.27
1866—1870	11	.11	10	09	21	.10
1871—1875	15	14	12	10	27	12
1876—1880	28	.24	24	.18	52	21
1881—1885	27	.22	27	.19	54	.20
1886—1890	76	.58	66	.44	142	.50
1891—1895	30	.21	34	.21	64	.21
1896—1900	72	.48	45	.26	117	.36
1901—1905	49	30	40	.22	89	.26
1906—1910	54	.31	50	.26	104	.28
1911—1915	45	.25	37	18	82	.21
1916—1920	25	.13	15	07	40	10
1921—1925	10	.05	12	.05	22	.05
1926—1930	16	.07	9	.04	25	.06
1931—1935	6	.02	3	.01	9	.02
1931	1	.02	2	.04	3	03
1932	3	.07	—	—	3	.03
1933	1	.02	1	.02	2	02
1934	—	—	—	—	—	—
1935	1	.02	—	—	1	01
1936	1	02	2	.04	3	.03

It will be seen from this that the mortality experience of the Measles of the present day stands, and has stood, for the last 16 years, at a point far below anything recorded in the 96 years of our records.

This position is not due to any diminution either in the number of epidemics within any given number of years or in the number of susceptibles attacked at each epidemic period. Briefly, the lowered death-rate is not due to lower prevalence but to lower fatality.

The fatality of Measles follows consistently certain well defined lines of age distribution. Thus, in the 96 years of our records since 1841, there have been in all 1,059 deaths referred to Measles. Of these 938 or 88.57% were under 5 years of age, 111 or 10.48% between 5 and 10 years of age, 7 or 0.66% between 10 and 15, and 3 or 0.28% over 15 years of age.

By far the most fatal year of life is the second year, the deaths in that year amounting to 34% of the total. The next most fatal period is the first year of life, the deaths being in the proportion of 19.3% of the total. This is followed by the third year with 18.2%, the fourth with 10.6% and the fifth with 6.5%.

Thus over 71% of the total deaths from Measles occur in the first three years of life.

Sex plays a part almost as consistently as age in the determination of Measles mortality. At all ages the male Measles mortality exceeds the female. Under 5 years of age the average female mortality is considerably below the male, but between 5 and 10 years the difference is not so marked.

At ages over 10 years our figures are so small as to be useless for this particular comparison.

At the present moment the local Measles mortality stands at the lowest point in our records, not only at all ages but at each age period, but most particularly at the age period under 5 years. In illustration, the Measles mortality under 5 years of age in the first quinquennium of this century was equal to 2.02 per 1,000 living under 5 years, whereas in the period 1931-1935 the mortality rate fell to 0.19 per 1,000 living, or one-eleventh of that in the beginning of the century.

In seeking explanations of these facts, some information is available from some of the facts of the recent epidemic.

The epidemic of 1936 began in July and continued throughout December, with its maximum density in October. 1,435 cases were recorded amongst the school population of the Public Elementary Schools during that period, and a large but unknown number amongst the population under school age, and a considerable but also unknown number amongst the population over school age, in addition to which there were many cases in private schools as well. In all, therefore, there were probably at least 2,500 cases at all ages of whom 3 died, all in the second year of life.

The first point to get hold of in the epidemiology of Measles is that it is never absent. People are apt to think of Measles purely in terms

of epidemics because these are the conspicuous phases of the disease and, as such, attract attention whenever an epidemic state prevails.

The epidemiologist, on the other hand, takes note of the sporadic cases that occur constantly in inter-epidemic periods, because these point unerringly to the presence of the infection circulating amongst a community the vast proportion of whom are protected by a previous attack of the disease. It is the unprotected minority which provides the cases of the disease in the next epidemic and in the inter-epidemic periods.

This minority is constantly being reinforced by the arrival of new members of the community in the form of births or immigrants from areas where the infection of Measles is an uncommon accident. Such are remote villages and isolated rural communities.

It is one of the penalties of urbanisation that various infections are introduced and remain in circulation amongst the dense populations of large towns with their innumerable opportunities of contact between all classes of the community.

Measles is spread by contact with infected persons whether those people are actually suffering from the disease or merely harbouring the infection for the time being. Thus we come back to the same general principle which is so well illustrated by Scarlet Fever, Diphtheria, Influenza and Whooping Cough, in fact the whole group of diseases associated with and spread through naso-pharyngeal infection.

The conditions of modern life are all in favour of the rapid spread of this type of infection, and it is just as well to recognise that there is no means of escaping infection although means of escaping the disease are now being tried out with a considerable prospect of success.

Measles *per se* is seldom fatal, but it kills through its complications, Bronchitis and Pneumonia.

The recent epidemic illustrates quite forcibly the fact that children over 5 years of age do not die from Measles or even from its complications except in isolated circumstances.

The protection therefore of children under 5 years of age from attack wherever possible is of importance, and it is here that the work of the Health Visitors has yielded such excellent results. If the children under 5 years of age who get Measles can be prevented from developing Bronchitis or Pneumonia, they can all, for practical purposes, be expected to recover.

Finally, it may interest the people who think that these diseases are due to insanitation, to know that the new estates were as badly hit in the recent epidemic as any other part of the town.

DIARRHŒA.

2 deaths from Diarrhœa occurred in 1936, both infants under 1 year.

The Diarrhœa group has disappeared as an important factor in the production of the local death-rate. This fact is one of the great causes of the decline in Infant Mortality which is such a striking feature of modern vital statistics.

The disappearance of Diarrhœa is the most signal triumph of sanitation of the century. It is a filth disease *par excellence*, and its presence is a sure index of the sanitary state of an area.

INFLUENZA.

16 deaths occurred from Influenza in 1936.

Table showing deaths and death-rates from Influenza :—

Period	Deaths and Death-Rates from Influenza					
	Number of Deaths			Death Rates per 1,000 living.		
	M.	F.	P.	M.	F.	P.
1841 - 1850	10	13	23	.073	084	079
1851—1860	3	3	6	.018	015	.016
1861 — 1870	4	1	5	.028	004	.012
1871 — 1880	—	2	2	.000	.008	.004
1881 — 1890	1	4	5	.003	.013	.009
1891 — 1900	121	143	264	.418	.433	425
1901 - 1910	79	82	161	239	220	.228
1911 - 1920	171	204	375	471	.505	.490
1921 - 1930	101	132	233	.258	300	.280
1841 — 1845	2	4	6	031	.055	.044
1846 - 1850	8	9	17	.110	.110	110
1851—1855	3	1	4	037	.011	.023
1856 - 1860		2	2	—	.020	.010
1861 - 1865	3	1	4	033	.009	.020
1866 — 1870	1	—	1	.010	—	.004
1871 - 1875		1	1		008	.004
1876 - 1880	—	1	1		007	.004
1881 - 1885						
1886 - 1890	1	4	5	007	.026	017
1891 - 1895	71	86	157	511	.533	.525
1896 — 1900	50	57	107	333	.333	.333
1901 - 1905	32	36	68	199	.198	.199
1906 — 1910	47	46	93	276	.241	258
1911 — 1915	39	36	75	.217	.182	198
1916 — 1920	132	168	300	.722	.819	774
1921 - 1925	40	68	108	209	.317	266
1926 - 1930	61	64	125	304	.284	293
1931 — 1935	38	51	89	180	.215	.199
1931	6	5	11	.144	.107	.125
1932	9	23	32	215	.490	.360
1933	15	16	31	356	.340	348
1934	6	3	9	141	063	.099
1935	2	4	6	046	.082	.065
1936	8	8	16	183	.163	.173

Influenza appeared in two waves in 1936. The first was, as usual, in the early part of the year, the worst month being March. There was also a good deal in April.

It reappeared in November and continued to increase through December.

The type was not severe, the fatalities occurring mainly amongst elderly people, the chief cause being Influenza and Bronchitis.

Influenza is perhaps the most obvious of the group of Nasopharyngeal infections. Everybody knows that if they want to escape Influenza they have got to avoid crowds or even groups of people. Thus cinemas are dangers, as are churches, crowded shops, tram-cars, even crowded streets, where people cough and sneeze in other people's faces with the most complete indifference to the welfare of others.

The conditions of modern life are all in favour of the spread of Influenza, and that is the reason for the tremendous density of the modern epidemics.

In one outstanding respect Influenza differs from the other members of the group such as Scarlet Fever, Diphtheria and Measles. For practical purposes an attack of any of these diseases confers lifelong immunity on the person attacked, however frequently they are infected subsequently. This is not the case with Influenza. One attack of the disease confers no life-long immunity. Such immunity as is conferred is of the shortest duration, so short indeed that the same person may go down with Influenza more than once a year.

A little thought will show that this must be the factor governing the density of Influenza epidemics.

Influenza is never absent. In other words the infection is for ever in circulation amongst the community.

SMALL POX.

There were no cases notified in 1936.

DEATHS FROM TUBERCULOSIS.

60 deaths (33 males, 27 females) were ascribed to the various forms of Tuberculosis in Ipswich in 1936 as compared with 57, 75, 59, 75 and 88 respectively in the five preceding years.

The low mortalities that have been the characteristic of recent local Tuberculosis statistics continued to prevail during 1936, the number of deaths in that year being equal with the number in 1933 which, up to that time, was the lowest on record.

The figure for 1935 still stands as the lowest in our series.

The average annual number of deaths from Tuberculosis between 1931 and 1936 was 69, by far the lowest average of any period since the commencement of our records.

51 deaths (31 males, 20 females) were referred to the Pulmonary variety of the disease and 9 (2 males, 7 females) to the Non-Pulmonary forms.

The annexed Table shows the death-rates per million living from the various forms of Tuberculosis from 1841-1850 to the present date :—

Periods	Pulmonary Tuberculosis			Non Pulmonary Tuberculosis.			All forms of Tuberculosis.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.
1841—1850	3,529	3,610	3,572	360	357	359	3,890	3,968	3,931
1851—1860	2,725	3,088	2,918	551	420	481	3,276	3,508	3,400
1861—1870	2,819	2,857	2,839	570	344	449	3,390	3,201	3,289
1871—1880	2,739	2,423	2,571	476	496	486	3,215	2,919	3,058
1841—1880	2,909	2,921	2,915	496	411	451	3,405	3,333	3,367
1881—1890	2,167	1,970	2,062	630	608	618	2,797	2,578	2,680
1891—1900	1,984	1,526	1,740	450	430	439	2,435	1,956	2,179
1881—1900	2,070	1,733	1,890	534	512	522	2,604	2,246	2,413
1901—1910	1,728	1,215	1,456	397	363	379	2,125	1,579	1,836
1911—1920	1,332	1,069	1,193	367	282	322	1,700	1,352	1,516
1921—1930	986	703	837	186	157	168	1,173	860	1,008
1841—1845	3,873	4,019	3,950	94	152	125	3,968	4,172	4,076
1846—1850	3,228	3,252	3,241	593	537	563	3,822	3,790	3,805
1851—1855	3,105	3,296	3,207	638	420	522	3,744	3,717	3,729
1856—1860	2,368	2,894	2,649	469	420	443	2,837	3,315	3,092
1861—1865	2,520	3,071	2,814	517	297	399	3,037	3,359	3,214
1866—1870	3,101	2,655	2,863	620	388	496	3,721	3,044	3,359
1871—1875	2,808	2,607	2,701	469	538	498	3,277	3,146	3,207
1876—1880	2,676	2,253	2,452	482	456	469	3,159	2,710	2,921
1881—1885	2,359	2,143	2,244	644	640	642	3,004	2,783	2,887
1886—1890	1,986	1,808	1,891	616	578	595	2,602	2,386	2,487
1891—1895	2,131	1,701	1,901	439	351	392	2,571	2,052	2,294
1896—1900	1,848	1,363	1,590	460	503	483	2,308	1,866	2,073
1901—1905	1,779	1,335	1,543	349	331	339	2,128	1,667	1,883
1906—1910	1,679	1,100	1,373	442	394	417	2,121	1,495	1,790
1911—1915	1,468	981	1,212	357	246	299	1,825	1,227	1,511
1916—1920	1,199	1,155	1,175	377	318	346	1,577	1,473	1,522
1921—1925	1,085	779	923	183	154	167	1,268	933	1,091
1926—1930	892	631	754	189	160	173	1,082	791	928
1931—1935	734	597	662	113	143	129	848	741	791
1931	869	776	820	144	215	182	1,014	992	1,002
1932	788	661	721	95	149	124	884	811	845
1933	618	425	516	214	85	145	832	510	662
1934	752	672	709	47	189	122	799	861	831
1935	649	455	547	69	82	76	718	538	623
1936	710	409	551	45	143	97	756	552	648

M.—Males F.—Females P.—Persons

This Table brings out very clearly the great decline in Tuberculosis mortality within the period of time (96 years) covered by it. The death-rate in 1936 was the lowest recorded in the whole series except that of the previous year.

In round figures the average death-rate from Tuberculosis at all ages at the present day is 77 % below the average experience of the middle of the 19th century.

The age distribution of the death-rates from all forms of Tuberculosis is exhibited in the following Table of death-rates of persons per million living :—

Age Periods.	1841—1880	1881—1900	1901—1910	1911—1920	1921—1930	1931—1935	1936
—5	3,488	3,020	2,405	1,869	731	598	413
—10	1,081	1,006	802	458	275	163	263
—15	1,300	1,041	604	531	270	166	134
—20	3,018	1,969	1,221	1,455	769	762	508
—25	4,620	2,758	2,181	1,924	1,369	1,088	898
—30	5,136	2,996	2,032	1,959	1,247	1,347	797
—35	5,107	3,212	2,227	1,897	1,494	937	1,023
—40	5,434	3,497	2,464	1,878	1,278	920	794
—45	4,780	3,492	2,256	1,990	1,464	946	816
—50	4,275	3,700	2,579	2,044	1,362	1,020	1,020
—55	3,547	2,776	2,065	1,788	1,452	1,355	728
—60	3,350	2,268	2,796	1,660	1,141	768	619
—65	2,225	2,442	2,118	1,358	1,142	832	1,006
—70	2,245	2,620	2,043	1,737	1,215	610	655
+70	690	948	1,722	522	408	321	222
All ages	3,367	2,413	1,836	1,516	1,008	791	648

This shows that Tuberculosis mortality has declined at every age period from the youngest to the oldest, though not to the same degree

throughout. The most gratifying and encouraging feature is undoubtedly the remarkable declines recorded at all ages under 15 years of age. Our figures show a drop of from 84% to 88% at these ages at the present day as compared with the experience of the middle of the last century.

The deaths of children under 1 year from the various forms of Tuberculosis have fallen away in a most remarkable manner since 1921. I give a Table illustrating this point :—

	Number of Deaths under 1 year from various forms of Tuberculosis.				Death-Rates per 1 000 Births
	Pulmonary	Cerebral	Abdominal.	All Forms.	
1841—1850	31	—	34	68	7.241
1851—1860	56	3	61	120	10 062
1861—1870	21	3	59	85	6.394
1871—1880	17	10	50	82	5.252
1881—1890	20	41	30	98	5.729
1891—1900	15	21	27	68	3 710
1901—1910	17	14	15	59	3.138
1911—1920	7	18	10	43	2.600
1921—1930	1	10	—	12	.800
1931—1936	—	4	—	5	.745

Thus in the last 16 years there have been recorded 17 deaths from Tuberculosis under 1 year. There have been no deaths from Abdominal Tuberculosis in infancy for 16 years, and only 1 death from Pulmonary Tuberculosis in the same period.

The chief form of Tuberculosis in infancy is Cerebral Tuberculosis, which accounted for 14 of the total, the other two being ascribed to General Tuberculosis.

I draw particular attention to the disappearance of Abdominal Tuberculosis as a cause of death in infancy, and to its continuing diminution at all ages under 5 years.

CANCER.

184 deaths (males 86, females 98) were referred to Cancer in 1936 as compared with 164, 151, 154, 155 and 133 respectively in the five preceding years.

The number of deaths was the highest recorded for either sex in the 96 years of our local records.

The death-rates were 1.97 per 1,000 living for males, 2.00 for females and 1.99 for persons.

The male death-rate was far in excess of any previous figure, but the female rate was equalled by that of 1933, which was, up to that time, the highest on record.

Cancer accounted for 16.5% of the deaths from all causes at all ages in 1936.

78 of the Cancer deaths were persons over 70 years of age. This was equal to 42.4% of the total Cancer deaths at all ages. This was 2.5% above the average experience of the period 1931-1935, which, in turn, exhibited the highest average proportion of any quinquennial period since 1841-1845.

Period.	Numbers and Crude Death-rates.					
	Males.		Females.		Persons.	
	No.	Rates.	No.	Rates.	No.	Rates.
1841—1850	12	.08	50	32	62	.21
1851—1860	21	12	80	.42	101	.28
1861—1870	47	.25	143	.66	190	47
1871—1880	96	.43	193	.77	289	61
1881—1890	115	.45	243	.84	358	66
1891—1900	182	.63	299	.90	481	77
1901—1910	290	.87	413	1.11	703	1 00
1911—1920	399	1.10	562	1.39	961	1 25
1921—1930	523	1 33	694	1.58	1217	1 46
1841—1845	4	.06	24	33	28	.20
1846—1850	8	.11	26	.31	34	.22
1851—1855	12	.15	43	.47	55	32
1856—1860	9	.10	37	.38	46	25
1861—1865	12	.13	77	.74	89	.45
1866—1870	35	,36	66	.59	101	48
1871—1875	48	.46	103	.86	151	.67
1876—1880	48	.42	90	.69	138	.56
1881—1885	50	.40	117	.84	167	63
1886—1890	65	.50	126	.84	191	68
1891—1895	74	.53	145	.91	219	73
1896—1900	108	.72	154	.90	262	81
1901—1905	117	.73	164	.90	281	.82
1906—1910	173	1.01	249	1.31	422	1.17
1911—1915	196	1.09	274	1.38	470	1.24
1916—1920	203	1 11	288	1.40	491	1 26
1921—1925	256	1.34	329	1.53	585	1.44
1926—1930	267	1.33	365	1 62	632	1.48
1931—1935	314	1.48	443	1 87	757	1.69
1926	44	1.10	61	1.38	105	1 24
1927	50	1.23	66	1.45	116	1 34
1928	49	1.21	80	1 75	129	1.50
1929	57	1.41	79	1 73	136	1.58
1930	67	1.63	79	1.72	146	1 68
1931	47	1.13	86	1 85	133	1.51
1932	67	1.60	88	1 87	155	1 74
1933	59	1.40	95	2.01	154	1 72
1934	62	1.45	89	1.86	151	1 67
1935	79	1 83	85	1.76	164	1.79
1936	86	1.97	98	2 00	184	1 99

The increase in the death-rates from Cancer, which is such a conspicuous feature of the vital statistics of this century, is a fact about which there is no dispute, but there is ground for very great differences of opinion as to whether there is in fact any actual increase in Cancer incidence.

In the first place our ageing population has introduced new possibilities of Cancer incidence, and in the second place the methods of diagnosis available since the beginning of this century have made commonplace elaborate methods of investigation undreamt of in the last century.

There can be no question that the two factors stated have had a predominant influence in the production of the present statistical position of the Cancer death-rate, but it might be too much to claim that they provide the whole explanation.

No statistical examination of the Cancer position is of any value without a detailed examination of the age distribution of the Cancer death-rates. For this purpose I have compiled a Table which exhibits the age distribution of the Cancer death-rates in terms of averages of six different time periods, viz., a period of 40 years from 1841-1880, a period of 20 years from 1881-1900, 3 periods of 10 years each since the beginning of this century, and one period of 5 years from 1931-1935.

AGE AND SEX DISTRIBUTION OF THE DEATH-RATES FROM CANCER PER MILLION LIVING.

Age Periods.	1841—1880.			1881—1900.			1901—1910.			1911—1920.			1921—1930.			1931—1935.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P
— 5	20	20	20	—	43	21	—	26	13	82	27	55	58	—	29	55	—	28
— 10	—	11	5	15	—	7	27	27	27	51	53	52	55	54	55	—	53	27
— 15	12	—	6	32	31	31	—	54	28	—	—	—	27	26	27	—	54	27
— 20	29	12	20	54	—	24	—	—	—	—	27	14	28	26	27	165	—	78
— 25	32	24	28	43	17	28	70	—	32	—	29	16	32	79	58	—	48	26
— 30	55	121	91	72	100	88	76	128	104	69	184	130	97	58	77	—	53	27
— 35	127	298	221	26	277	161	40	105	75	35	196	119	106	183	147	193	113	151
— 40	70	724	418	274	586	440	273	916	616	190	673	447	292	479	392	284	244	262
— 45	261	916	618	312	1,168	772	716	1,130	936	467	1,011	756	529	1,083	821	290	1,263	811
— 50	249	1,801	1,083	867	1,669	1,302	1,398	1,859	1,644	925	2,086	1,539	1,023	2,003	1,532	654	2,251	1,477
— 55	718	1,842	1,328	1,613	2,359	2,019	2,371	2,651	2,523	1,999	2 513	2,276	2,439	2,634	2,542	2,056	3,019	2,560
— 60	917	1,987	1,498	2,176	4,541	3,481	3,928	3,582	3,741	3,338	3,792	3,580	3,731	3,389	3,550	4,352	3,468	3,885
— 65	1,239	2,682	2,041	3,266	3,442	3,365	4,846	5,288	5,095	5,236	4,085	4,595	4,662	5,445	5,093	4,608	4,551	4,577
— 70	2,447	2,552	2,505	5,108	6,096	5,664	5,939	5,854	5,890	10,417	7,973	9,033	8,205	6,638	7,334	7,818	8,266	8,068
— 75	1,967	2,714	2,404	5,479	4,287	4,804	9,045	7,705	8,252	11,039	10,550	10,740	12,436	8,575	10,140	10.740	11,568	11,222
— 80	2,331	2,822	2,603	3,124	4,797	4,099	9,230	8,826	8,992	15,178	11,200	12,736	13,992	12,573	13,108	20,145	15,205	17,112
— 85	2,797	2,663	2,714	2,820	6,563	5,025	6,172	7,105	6,705	6,905	11,389	9,699	11,420	15,877	14,238	19,658	16,074	17,375
+ 85	935	517	666	4,746	2,791	3,389	1,808	8,858	6,373	5,076	9,090	7,590	8,962	11,242	10,495	8,247	14,846	12,605
All Ages	248	579	424	548	877	723	879	1,112	1,002	1,103	1,394	1,256	1,336	1,580	1,465	1,488	1,875	1,693
+ 70	2,131	2,579	2,393	4,400	4,659	4,551	8,208	8,034	8,106	11,300	10,754	10,962	12,554	11,102	11,663	14,524	13,595	13,962

M.—Males F.—Females P.—Persons

The general features of this Table are obvious enough.

Thus there is little Cancer under 25 years of age and the sex distribution is about equal.

Between 25 and 45 years of age there is an increase in the death-rate for both sexes, but far more in the case of females on account of the special liability of women at these ages to suffer from Cancers of the generative organs and breast.

At ages over 45 the death-rates have increased very greatly for both sexes, especially over 70 years of age. It is notable that at these very high ages the male Cancer death-rate on the average exceeds the female, except, curiously enough, over 85 years of age, when the female excess once more establishes itself.

There is much to be said for the view that part of the increase in the death-rate at the higher ages is due to delay in the incidence of death in consequence of surgical or other treatment in previous years.

SITE DISTRIBUTION OF THE DEATHS FROM CANCER.

Site.	Males	Females.	Persons.
Intestines	14	22	36
Stomach	17	6	23
Breast	—	19	19
Uterus	—	14	14
Oesophagus	11	1	12
Rectum	6	5	11

These are the same sites as in 1935 with the exception that the Oesophagus replaces the Liver. The Intestines move up to the first place from the second.

The numbers of deaths from Cancer of the Breast and the Uterus were practically the same as in 1935.

These sites of selection recur with extraordinary regularity year after year, especially the Stomach, the Intestines, the Rectum, the Uterus and the female Breast. It is notable that Intestinal Cancers are practically confined to the large intestine with especial incidence on the large intestine of the female.

It is the simplest thing in the world to demonstrate these elementary facts, which makes it all the more humiliating to confess that there is no satisfactory explanation of why these special sites are selected by Cancers.

DEATHS FROM DISEASES OF THE RESPIRATORY SYSTEM.

The group includes Laryngitis, Bronchitis, Pneumonia, Pleurisy, Asthma, etc.

188 deaths (87 males, 101 females) were referred to this group in 1936 as compared with 117, 123, 127, 155 and 151 respectively in the five preceding years.

Thus there was a considerable increase in the number of Respiratory deaths in 1936. Indeed the number was greater than in any year since 1927.

96 deaths (40 males, 56 females) were ascribed to the various forms of Bronchitis, 82 (43 males, 39 females) to the different types of Pneumonia, and 10 (4 males, 6 females) to all other diseases of the Respiratory System.

The deaths from Bronchitis increased by 34 and the Pneumonias by 36 as compared with the previous year.

As always, season of the year was closely connected with Respiratory fatality.

The worst month was March with 43 fatalities, followed by February with 22, and January and April with 20 each. On the other hand, the months with the lowest mortalities were July 4, June 8 and September and November 9 each.

20 of the deaths were of children under 5 years of age. This was more than double the mortality of either of the two previous years, but much nearer the average experience of the present time.

The general facts in connection with the Respiratory death-rates are given in this Table :—

Periods.	Diseases of the Respiratory System.						
	Deaths			Death-Rates.			Male deaths per 1,000 Female deaths.
	M.	F.	P.	M	F.	P.	
1841—1850	502	471	973	3.68	3.06	3.35	1,065
1851—1860	636	558	1194	3.84	2.96	3.37	1,139
1861—1870	704	657	1361	3.67	3.05	3.37	1,071
1871—1880	832	754	1586	3.81	3.03	3.39	1,103
1881—1890	924	802	1726	3.65	2.78	3.19	1,152
1891—1900	1063	918	1981	3.67	2.77	3.18	1,158
1901—1910	788	795	1583	2.38	2.13	2.24	991
1911—1920	852	820	1672	2.34	2.03	2.18	1,040
1921—1930	718	774	1492	1.83	1.75	1.79	927
1841—1845	202	161	363	3.17	2.23	2.67	1,254
1846—1850	300	310	610	4.13	3.78	3.95	967
1851—1855	320	284	604	4.00	3.14	3.54	1,126
1856—1860	316	274	590	3.70	2.81	3.22	1,153
1861—1865	353	339	692	3.88	3.25	3.54	1,041
1866—1870	351	318	669	3.62	2.87	3.22	1,103
1871—1875	384	346	730	3.67	2.90	3.27	1,109
1876—1880	448	408	856	3.92	3.15	3.51	1,098
1881—1885	453	406	859	3.69	2.91	3.28	1,115
1886—1890	471	396	867	3.62	2.66	3.10	1,189
1891—1895	591	494	1085	4.25	3.06	3.63	1,196
1896—1900	472	424	896	3.14	2.48	2.78	1,113
1901—1905	378	402	780	2.35	2.21	2.28	940
1906—1910	410	393	803	2.41	2.06	2.23	1,043
1911—1915	465	381	846	2.59	1.91	2.23	1,220
1916—1920	387	439	826	2.11	2.14	2.13	881
1921—1925	347	392	739	1.81	1.82	1.81	885
1926—1930	371	382	753	1.84	1.69	1.76	971
1931—1935	312	361	673	1.47	1.52	1.50	864
1931	70	81	151	1.69	1.74	1.72	864
1932	60	95	155	1.43	2.02	1.74	631
1933	63	64	127	1.49	1.36	1.42	984
1934	63	60	123	1.48	1.26	1.36	1,050
1935	56	61	117	1.29	1.26	1.28	918
1936	87	101	188	1.99	2.06	2.03	861

M.—Males F.—Females P.—Persons

The seasonal nature of Respiratory mortalities is well brought out in the following Table of death-rates per million living.

Period	March	June	September	December
1841—1850	5,213	2,978	1,891	3,384
1851—1860	4,963	3,473	1,698	3,431
1861—1870	5,100	3,071	1,991	3,392
1871—1880	5,240	3,030	1,490	3,874
1881—1890	4,857	2,823	1,550	3,579
1891—1900	5,425	2,737	1,411	3,265
1901—1910	3,748	1,918	1,064	2,328
1911—1920	3,798	1,947	872	2,154
1921—1930	3,430	1,321	734	1,712
1931—1935	2,825	1,166	683	1,367
1936	3,698	1,697	1,032	1,721

Even more important than the season of the year is the age of the individual. In broad general terms Respiratory diseases are fatal at the two extremes of life.

There is relatively high mortality experience under 5 years of age, but the real excess occurs at ages over 65 years. This is very evident in the Table showing the age and sex distribution of the average death-rates from Respiratory diseases.

Vide Table facing this page.

Another notable feature of this Table is the improved position of the Respiratory mortality of to-day as compared with past experience at all age periods under 70, but particularly under 5 years.

At ages over 70 there is little variation in the average mortality throughout the whole period. The experience of the last 5 years is quite possibly exceptional.

DEATHS FROM DISEASES OF THE CIRCULATORY SYSTEM.

(a) Diseases of the Heart.

226 deaths (111 males, 115 females) were ascribed to Diseases of the Heart in 1936, as compared with 230, 201, 229, 194 and 199 respectively in the 5 preceding years.

There was therefore little change in this group.

In more detail, 35 deaths (15 males, 20 females) were credited to Chronic Endocarditis, as compared with 51 in the previous year.

126 deaths (56 males, 70 females) were certified as due to Degenerations of the Heart Muscle, as compared with 127 in the previous year.

38 deaths (26 males, 12 females) were ascribed to the Angina group, as compared with the same number in the previous year. In 21 of these the diagnosis was made as a result of Post Mortem examination in cases

AGE AND SEX DISTRIBUTION OF THE DEATH RATES FROM RESPIRATORY DISEASES PER MILLION LIVING.

Ages	−5.			−10.			−15.			−20.			−25.			−30.			−35.			−40.			−45.			−50.			−55.			−60.			−65.			−70.			+70.		
Periods.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
1841—1880	13,134	11,117	12,140	572	796	685	215	201	208	265	427	353	506	311	396	626	499	556	1,042	596	798	1,478	911	1,177	1,567	982	1,248	3,275	1,264	2,195	4,137	2,014	2,985	6,277	4,461	5,290	6,456	7,098	6,813	12,887	10,626	11,648	20,901	18,354	19,410
1881—1900	13,671	9,837	11,733	540	485	514	112	173	143	252	167	206	304	259	279	776	343	539	587	393	483	1,401	826	1,094	1,737	929	1,303	2,436	1,495	1,925	3,687	1,818	2,671	5,293	3,346	4,219	9,527	4,978	6,969	11,979	11,576	11,752	21,421	20,548	21,049
1901—1910	8,777	8,337	8,541	380	379	380	115	27	70	153	135	157	247	122	180	418	96	242	527	494	507	637	398	508	868	317	576	1,580	902	1,216	2,369	1,329	1,798	3,036	2,057	2,507	4,040	4,300	4,191	7,353	5,852	6,430	19,288	18,130	18,606
1911—1920	8,167	5,643	6,900	387	503	445	110	241	176	269	190	227	214	324	273	277	338	309	393	98	239	609	705	662	1,198	635	895	1,022	522	755	2,153	754	1,409	3,266	1,772	2,470	4,876	2,796	3,720	9,274	6,632	7,896	19,978	19,810	19,870
1921—1930	4,360	3,252	3,825	248	274	260	55	106	81	172	157	164	226	105	159	325	175	246	460	153	295	584	446	511	718	469	587	1,139	582	851	1,398	851	1,110	1,784	1,383	1,568	3,420	2,244	2,777	5,821	5,084	5,409	19,536	18,696	19,020
1931—1935	2,015	2,728	2,365	55	161	109	112	—	55	221	150	184	235	—	106	113	213	165	387	113	242	142	183	164	726	126	405	363	613	492	1,344	359	828	1,995	1,129	1,536	3,110	1,327	2,132	4,292	4,741	4,542	16,964	16 405	16,665
1936	2,707	2,806	2,755	267	260	263	272	—	134	—	—	—	284	—	128	—	—	—	—	—	—	687	591	635	351	305	326	1,405	989	1,190	764	695	728	876	3,120	2,063	4,456	3,668	4,024	8,154	6,466	7,213	24,705	20,198	21,980

M.—Males F.—Females P.—Persons

of sudden death. This is the factor accounting for the increase in the number of deaths from the Anginal group during recent years. There is no evidence of real increase in the incidence of Angina Pectoris.

The same observation holds good with regard to the other groups of Diseases of the Heart. The deaths from these have more than doubled since the beginning of this century, but no one acquainted with the subject could argue that Heart Diseases were either twice as numerous or twice as fatal now as they were at the beginning of the century. The increase is in reality a transfer from one group of diseases to another with much the same meaning. Thus senility has now practically ceased to be given as a cause of death. It has been replaced by the increase in the number of deaths referred to Degenerations of the Heart Muscle.

Considerable changes have taken place in the certification of causes of death within the Heart Disease group itself. Thus there has been a great increase in the number of deaths ascribed to Valvular Heart Disease. This has taken place by transfer from the group of more or less ill-defined forms of Heart Disease.

The whole question of death certification is unsatisfactory for many reasons. For example, certain practitioners have a tendency to find that people die from conditions which other practitioners do not appear to find fatal.

Thus I kept a column in these returns for years for a condition of the Heart which was given as a cause of death by one practitioner only. This column has remained empty since his retirement from practice. Instances of this sort of thing could be multiplied, but it is enough to state the fact.

In round figures two-thirds of the deaths from Diseases of the Heart were of persons over 70 years of age. Hence the transfer from Senility.

(b) Deaths Ascribed to Arterio Sclerosis.

34 deaths (17 males, 17 females) were classified to this group in 1936. This was below the average of recent years.

The Table explains itself :—

Periods.	Arterio-Sclerosis.				Total.	
	With a Cerebral Lesion		Without a Cerebral Lesion			
	Numbers.	Rates.	Numbers.	Rates	Numbers.	Rates.
1921—1930	96	.11	76	.09	172	.20
1921—1925	22	.05	29	.07	51	.12
1926—1930	74	.17	47	.11	121	.28
1931—1935	154	.34	45	.10	199	.44
1931	15	.17	5	.05	20	.22
1932	42	.47	18	.20	60	.67
1933	29	.32	5	.05	34	.38
1934	30	.33	7	.07	37	.41
1935	38	.41	10	.09	48	.52
1936	31	.33	3	.03	34	.36

From the mortality point of view, the chief importance of this group lies in its association with Cerebral Hæmorrhage and other circulatory disturbances of the Central Nervous System. In 1936 this meant that 24 deaths were included as being due to Arterio Sclerosis, which formerly would have been returned as due to Cerebral Hæmorrhage. This is another instance of an increase in one classification at the expense of another merely in consequence of a change in death certification.

(c) Total Deaths due to Circulatory Diseases.

The Table shows the decennial and quinquennial distribution of the deaths and death-rates from Diseases of the Heart, Diseases of the Arteries and all other diseases of the Circulatory System since 1841.

Periods.	Deaths and Death-rates of persons from Diseases of the Circulatory System.						
	Number of Deaths.				Death-rates per 1,000 living.		
	Heart Diseases.	Arterial Diseases.	All Others.	Total.	Heart Diseases.	Arterial Diseases.	All Circulatory Diseases.
1841-1850	146	19	23	188	.503	.065	.648
1851-1860	235	38	11	284	.665	.107	.803
1861-1870	378	52	19	449	.937	.129	1.113
1871-1880	536	61	11	608	1.147	.130	1.301
1881-1890	579	68	9	656	1.071	.125	1.213
1891-1900	742	85	9	836	1.194	.136	1.345
1901-1910	795	71	13	879	1.128	.100	1.254
1911-1920	1,010	155	14	1,179	1.321	.202	1.542
1921-1930	1,158	238	21	1,417	1.389	.285	1.700
1841-1845	57	9	18	84	.420	.066	.619
1846-1850	89	10	5	104	.576	.064	.673
1851-1855	120	18	4	142	.704	.105	.833
1856-1860	115	20	7	142	.629	.109	.776
1861-1865	181	37	8	226	.926	.189	1.157
1866-1870	197	15	11	223	.949	.072	1.074
1871-1875	249	31	6	286	1.115	.138	1.281
1876-1880	287	30	5	322	1.179	.123	1.323
1881-1885	287	26	7	320	1.096	.099	1.220
1886-1890	292	42	2	336	1.045	.150	1.202
1891-1895	341	39	4	384	1.142	.130	1.286
1896-1900	401	46	5	452	1.247	.143	1.405
1901-1905	373	35	7	415	1.092	.102	1.215
1906-1910	422	36	6	464	1.173	.100	1.289
1911-1915	515	85	6	606	1.359	.224	1.602
1916-1920	495	70	8	573	1.277	.180	1.476
1921-1925	486	81	7	574	1.195	.199	1.412
1926-1930	672	157	14	843	1.572	.367	1.972
1931-1935	1,053	247	23	1,323	2.355	.552	2.959
1936	226	41	7	274	2.446	.443	2.965

From this it appears that the death-rates from Diseases of the Heart have doubled since the beginning of this century for reasons already

pointed out. The same considerations apply in the case of Arterio Sclerosis.

In the group of all other Diseases of the Circulatory System there is now included High Blood Pressure. This is another example of the same tendency to transfer diseases from one group to another, or to introduce entirely new groups at the expense of older classifications. These do not mean new diseases, but more knowledge. They do not connote deaths in addition to those in the older classifications, but transfers to new and, probably, more accurate groups.

VIOLENCE.

The decennial death-rates from Violence are set forth as follows :—

Periods	Death-rates per 1,000 living.		
	Males.	Females.	Persons.
1841—1850	.89	.25	.55
1851—1860	.88	.38	.61
1861—1870	.89	.26	.56
1871—1880	.77	.20	.47
1881—1890	.75	.23	.47
1891—1900	.78	.29	.52
1901—1910	.73	.29	.50
1911—1920	.74	.36	.54
1921—1930	.62	.29	.45
1921—1925	.59	.27	.42
1926—1930	.66	.32	.48
1931—1935	.68	.28	.47
1931	.77	.23	.49
1932	.86	.27	.55
1933	.71	.40	.55
1934	.63	.29	.45
1935	.46	.20	.32
1936	.73	.26	.48

45 deaths (32 males, 13 females) were ascribed to Violence in 1936, as compared with 30, 41, 49, 49 and 43 respectively in the preceding 5 years.

14 of these (12 males, 2 females) were due to suicide, as compared with 8 in the previous year.

5 suicides (3 males, 2 females) were due to coal gas poisoning.

5 were due to hanging.

9 deaths (5 males, 4 females) were due to accidental falls, as compared with 8 in the previous year.

14 deaths (11 males, 3 females) were due to vehicular violence, as compared with 9 in the previous year.

5 of these (4 males, 1 female) were caused by motor-cars, 1 (female) by a motor lorry, 1 (male) by a motor 'bus, and 1 (female) by a trolley 'bus.

2 males were killed by motor cycles and 4 males by pedal cycles.

Since their introduction in 1923 the trolley 'buses have been responsible for 14 deaths.

They are more dangerous than either horse or electric trams on account of their greater speed and especially their comparative silence.

Since the beginning of this century 150 inhabitants have been killed in motor accidents, 61 by private motor-cars, 38 by motor cycles, 33 by motor lorries, 9 by motor 'buses, and 8 by taxis.

On the average, at the present day, more than 10 people are killed in the streets of Ipswich every year.

PUERPERAL MORTALITY.

8 deaths were associated with Pregnancy and Childbirth in 1936.

The Maternal Mortality rate was equal to 5.80 per 1,000 births, a figure considerably above the average.

2 deaths were referred to Puerperal Sepsis, 2 to Puerperal Hæmorrhage, 2 to Eclampsia, and 2 to all other conditions of Pregnancy and Childbirth.

The death-rates per 1,000 births are set forth in the Table :—

Periods.	Puerperal Fever.	Puerperal Hæmorrhage.	Puerperal Convulsions	All other Conditions.	Total all causes.	
					No.	Rates.
1841—1850	1.81	.42	.53	1.71	42	4.47
1851—1860	1.00	.17	1.00	1 60	45	3.77
1861—1870	.90	.45	.52	1.51	45	3.38
1871—1880	1.53	.57	.25	1 72	64	4.09
1881—1890	2.16	.52	.41	1.41	77	4.50
1891—1900	1.57	.50	.22	1.92	75	4 21
1901—1910	.63	1.07	63	1.44	70	3 72
1911—1920	1.39	.60	.97	1.33	71	4 29
1921—1930	2.20	.53	.66	.66	61	4 06
1931—1935	1.34	.29	.29	1.64	24	3 57
1921	1.74	—	—	1.74	6	3.46
1922	.63	—	1.89	.63	5	3 15
1923	1.29	—	—	.64	3	1.93
1924	1.39	—	.69	.69	4	2.79
1925	2.81	.70	—	—	5	3.52
1926	1.94	.65	1.94	1.30	9	5.84
1927	2.11	1.41	.71	.71	7	4.94
1928	4.91	2.81	.70	—	12	8.42
1929	2.08	—	.69	—	4	2.77
1930	3.40	—	—	.68	6	4 08
1931	1.45	—	—	.73	3	2 18
1932	—	73	.73	2 20	5	3 66
1933	1.56	78	.78	.78	5	3.92
1934	4 64	—	—	1.54	8	6 19
1935	.71	—	—	1 42	3	2 13
1936	1.45	1.45	1 45	1 45	8	5 80

The variations from the average experience in 1936, therefore, were the deaths from Hæmorrhage and Eclampsia.

I repeat the Table of Maternal Mortalities in terms of females living aged 15-45 years :—

MATERNAL MORTALITY.

Periods.	Number of Deaths.	Death-rates per 1,000 women living 15-45 years of age.
1841—1850	42	.549
1851—1860	45	.504
1861—1870	45	.449
1871—1880	64	.564
1881—1890	77	.580
1891—1900	75	.477
1901—1910	70	.394
1911—1920	71	.373
1921—1930	61	.299
1841—1845	18	.501
1846—1850	24	.592
1851—1855	18	.419
1856—1860	27	.582
1861—1865	25	.509
1866—1870	20	.391
1871—1875	32	.586
1876—1880	32	.543
1881—1885	33	.518
1886—1890	44	.638
1891—1895	46	.612
1896—1900	29	.353
1901—1905	35	.402
1906—1910	35	.386
1911—1915	33	.352
1916—1920	38	.394
1921—1925	23	.231
1926—1930	38	.365
1931—1935	24	.219
1936	8	.354

From this it appears that the mortality rate for 1936 was below that of the quinquennial averages of the whole period from 1841-1845 onwards, with the exception of the periods 1921-1925 and 1931-1935.

In last year's Report a protest was entered against the mismanagement of the campaign for the improvement in maternal mortality. I am glad to note that this does not seem to have been in vain.

No campaign of this kind should be sponsored by irresponsible platform publicists.

The psychology of the pregnant woman is not a thing to be outraged by people of that type, and the sooner their mischievous activities are curbed the better will it be for the progress of the schemes necessary to bring about such reduction of Puerperal Mortality as is practicable.

There has been a great deal of wild talk about the prevention of this and that, and that Puerperal Mortality could be halved if this or that were done.

I do not think we know enough about the causes of, say, Puerperal Septicæmia, to dogmatise in this crude fashion.

Of one thing, however, I am convinced, and that is the necessity for efficient ante-natal supervision of the pregnant woman from the point of view of prevention and it is the most hopeful sign for the future that women are realising in ever-increasing numbers the value of the facilities now within the reach of every pregnant woman in Ipswich.

The act of birth itself is a physiological process which can be left to itself in the vast majority of cases. There is no need in the great majority for that pernicious type of work known as "Meddlesome Midwifery."

What is required from Doctor and Midwife is the knowledge necessary to recognise when help is needed and the skill to carry it out. There is room for improvement here.

INFANT MORTALITY.

The Table gives the number of Infant deaths and the Infant Mortality rates since 1841 :—

Period	No. of Deaths			Infant Death Rates.						Female Infant Deaths per 1,000 Male
				Males.		Females.		Infants.		
	Males	Fmls	Infants	Ips.	E.&W.	Ips.	E.&W.	Ips.	E.&W.	Ipswich.
1841—1850	913	743	1,656	190	167	161	137	176	153	812
1851—1860	1,122	931	2,053	184	168	159	139	172	154	829
1861—1870	1,141	982	2,123	167	168	151	139	159	154	861
1871—1880	1,369	1,024	2,393	171	163	134	134	152	149	748
1881—1890	1,327	1,004	2,331	153	155	118	128	136	142	756
1891—1900	1,582	1,181	2,763	174	168	135	138	155	153	746
1901—1910	1,322	1,044	2,366	138	140	113	114	126	128	789
1911—1920	889	615	1,504	105	112	76	89	91	100	691
1921—1930	496	343	839	65	81	46	63	56	72	691
1841—1845	361	296	657	176	162	143	133	160	148	815
1846—1850	552	447	999	201	172	175	142	188	157	809
1851—1855	550	453	1,003	188	172	158	141	173	156	823
1856—1860	572	478	1,050	180	166	160	137	171	152	835
1861—1865	567	492	1,059	171	166	156	136	164	151	867
1866—1870	574	490	1,064	164	170	146	142	155	157	855
1871—1875	647	487	1,134	169	167	133	138	152	153	752
1876—1880	722	537	1,259	172	159	135	130	154	145	744
1881—1885	647	496	1,143	152	152	117	125	134	139	766
1886—1890	680	508	1,188	155	159	119	131	138	145	747
1891—1895	763	559	1,322	171	165	128	135	150	151	732
1896—1900	819	622	1,441	177	170	141	141	160	156	759
1901—1905	763	605	1,368	155	151	128	124	142	138	792
1906—1910	559	439	998	110	129	97	105	109	117	785
1911—1915	525	365	890	115	121	85	97	101	110	695
1916—1920	364	250	614	92	101	65	79	78	90	686
1921—1925	274	197	471	71	86	50	66	61	76	718
1926—1930	222	146	368	58	77	41	59	50	68	657
1931—1935	148	159	307	43	70	48	54	45	62	1074
1911	99	82	181	107	142	96	117	102	130	891
1912	120	75	195	135	106	87	84	112	95	625
1913	109	65	174	119	120	74	96	96	108	596
1914	101	87	188	108	116	100	93	104	105	861
1915	96	56	152	117	123	70	96	94	110	583
1916	78	57	135	90	102	71	80	81	91	730
1917	71	48	119	107	108	73	85	90	96	760
1918	66	49	115	94	108	71	86	83	97	742
1919	59	41	100	89	100	58	78	70	89	694
1920	90	55	145	89	90	55	69	72	80	611
1921	70	58	128	83	93	65	72	74	83	828
1922	38	47	85	49	87	58	66	54	77	1236
1923	52	27	79	66	78	35	60	51	69	519
1924	49	26	75	67	85	37	65	52	75	530
1925	65	39	104	93	84	54	66	73	75	600
1926	46	24	70	59	79	31	61	45	70	521
1927	51	41	92	69	79	59	60	65	70	803
1928	46	23	69	59	74	35	56	48	65	500
1929	44	32	76	60	83	44	65	52	74	727
1930	35	26	61	45	68	37	51	41	60	742
1931	46	36	82	65	75	53	57	59	66	782
1932	22	40	62	32	73	57	56	45	65	1818
1933	30	29	59	45	72	47	55	46	64	966
1934	33	27	60	50	65	42	51	46	59	818
1935	17	27	44	24	64	38	50	31	57	1588
1936	36	26	62	51	—	38	—	45	59	722

Thus the Infant Mortality rate in 1936 returned to the average experience of the preceding 5 years. This was brought about entirely by a rise in the male mortality which was above the average of recent years. The cause of this was the excessive mortality from prematurity amongst male infants.

The female rate remained at the low level of the previous year.

As usual the infant mortality of the Borough was well below that of England and Wales and still more so of the large towns.

Indeed, when one considers the infant mortality of this ancient industrial town and recalls its unsavoury reputation up to the end of the last century, one cannot help a feeling of astonishment at the revolution that has taken place.

Our Table shows that on the average the infant mortality of Ipswich exceeded that of England and Wales throughout the greater part of that portion of the 19th century of which we have records. It shows also that at the beginning of this century the local rate was still above that of the country as a whole.

Since 1906, on the other hand, the local rate has been consistently below that of the whole country.

I give the usual annual Table of causes of infant death :—

See Table facing this page.

Thus the principal causes of death group themselves quite readily.

The group including Congenital Malformations, Debility, Prematurity and the other diseases of early infancy accounted for 38 out of 62 deaths under 1 year or 61%, and Respiratory diseases for 15 deaths or 24%.

The seven principal Zymotic diseases accounted for 8% of the total.

Perhaps the most striking feature of this Table is the age distribution of the deaths, which shows that infant mortality at the present day is concerned mainly with the first three months of life. Actually 39% of the total deaths under 1 year occurred in the first four days of life. 64% of the deaths occurred in the first month of life and 77% under three months.

The Table showing the average age distribution of the infant death-rates since 1841-1850 sheds a flood of light on the present position of infant mortality.

See Table facing this page.

There is improvement at all age periods under 1 year, even the earliest, but the alteration becomes less the nearer we come to the actual date of birth. This brings us back again to the act of birth itself as a process in which there is some danger to the mother but much more to the infant. This point has been emphasised again and again in these

INFANT MORTALITY TABLE, 1936.

DAYS.

Cause of Death.	1			2			3			4			5			6			7		
	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I
Pertussis																					
Diphtheria																					
Diarrhoea																					
Influenza																					
Septicaemia																					
Bronchitis																					
Pneumonia											1	1									
Congenital Malformations ...		2	2																		
Atrophy, Debility and Marasmus ...		1	1							1		1									
Prematurity	11	2	13	4		4				1	1	2									
O.D. Early Infancy																	1	1			
TOTAL	11	5	16	4	—	4	—	—	—	2	2	4	—	—	—	—	1	1	—	—	—

WEEKS. and **MONTHS.** (1–4)

Cause of Death.	Weeks 1			Weeks 2			Weeks 3			Weeks 4			Months 1			Months 2			Months 3			Months 4		
	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I
Pertussis																								
Diphtheria																1		1						
Diarrhoea																								
Influenza																								
Septicaemia				1		1							1		1		1	1						
Bronchitis					1	1								1	1									
Pneumonia		1	1				1		1		1	1	1	2	3	1	3	4						
Congenital Malformations ...		2	2	1		1					1	1	1	3	4									
Atrophy, Debility and Marasmus ...	1	1	2	1		1	1		1				3	1	4				1	1	2	1		1
Prematurity	16	3	19	2	1	3	1		1				19	4	23									
O.D. Early Infancy		1	1		1	1	1		1		1	1	1	3	4									
TOTAL	17	8	25	5	3	8	4	—	4	—	3	3	26	14	40	2	4	6	1	1	2	1	—	1

MONTHS. (5–12) and **—1 year.**

Cause of Death.	5			6			7			8			9			10			11			12			—1 year.		
	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I	M	F	I
Pertussis					1	1					1	1													—	2	2
Diphtheria																									1	—	1
Diarrhoea								1	1											1	1				—	2	2
Influenza																	1	1							—	1	1
Septicaemia													1		1										2	1	3
Bronchitis										1		1										1		1	2	1	3
Pneumonia				1		1					1	1				1	1	2				1		1	5	7	12
Congenital Malformations ...																									1	3	4
Atrophy, Debility and Marasmus ...																									5	2	7
Prematurity																									19	4	23
O.D. Early Infancy																									1	3	4
TOTAL	—	—	—	1	1	2	—	1	1	1	2	3	1	—	1	1	2	3	—	1	1	2	—	2	36	26	62

M.—Males F.—Females I.—Infants

AGE DISTRIBUTION OF THE INFANT DEATH-RATES.

	0—1 week.			0—1 month			0—3 months.			3—6 months.			6—9 months.			9—12 months.			—1 year.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
1841—1850	28.64	29.08	28.85	54.19	47.52	51.00	96.38	81.81	89.23	39.72	32.33	36.09	34.07	29.08	31.62	20.69	18.01	19.38	190	161	176
1851—1860	29.56	24.67	27.16	50.59	40.94	45.87	87.87	74.18	81.17	39.91	35.12	37.56	30.88	24.15	27.58	25.62	26.04	25.82	184	159	172
1861—1870	29.09	20.80	25.05	50.11	38.84	44.61	80.82	72.90	76.95	36.59	30.82	33.77	29.09	24.35	26.78	21.16	23.27	22.19	167	151	159
1871—1880	26.23	16.17	21.33	47.22	31.81	39.71	78.82	55.61	67.51	34.60	32.47	33.56	31.23	24.58	27.99	26.35	21.95	24.21	171	134	152
1881—1890	28.07	20.62	24.38	45.24	33.47	39.40	74.83	55.03	65.01	29.70	23.80	26.77	26.68	18.97	22.86	22.74	20.50	21.63	153	118	136
1891—1900	27.60	20.50	24.12	47.36	35.39	41.49	84.45	63.92	74.38	37.86	28.64	33.34	28.48	24.40	26.48	23.84	18.32	21.13	174	135	155
1901—1910	30.46	22.68	26.65	51.11	39.07	45.21	79.49	61.55	70.69	23.88	19.75	21.86	19.92	15.95	17.98	14.60	16.06	15.32	138	113	126
1911—1920	26.07	19.87	23.03	41.25	31.35	36.40	62.35	45.79	54.23	15.52	11.11	13.36	15.17	10.44	12.75	12.32	8.76	10.58	105	76	91
1921—1930	24.46	15.54	20.06	33.81	23.52	28.73	46.69	30.96	38.93	7.23	5.27	6.26	5.65	5.00	5.33	5.52	5.28	5.40	65	46	56
1841—1845	26.52	22.37	24.43	52.06	42.80	47.40	96.26	71.98	84.06	32.41	35.02	33.72	30.45	23.34	26.88	18.17	13.61	15.88	176	143	160
1846—1850	30.21	34.48	32.27	56.06	51.33	53.78	96.46	89.73	93.22	45.14	30.17	37.93	36.76	33.70	35.28	22.57	21.55	22.07	201	175	188
1851—1855	32.60	25.48	29.07	51.81	40.50	46.20	93.34	73.67	83.59	41.18	35.96	38.59	31.22	25.13	28.21	22.99	23.39	23.19	188	158	173
1856—1860	26.78	23.88	25.37	49.46	41.37	45.55	82.86	74.67	78.90	38.75	34.30	36.60	30.56	23.20	27.00	28.04	28.59	28.30	180	160	171
1861—1865	26.29	22.90	24.64	48.36	41.34	44.94	81.31	77.92	79.66	33.85	29.89	31.92	31.74	23.53	27.74	24.48	25.12	24.79	171	156	164
1866—1870	31.74	18.83	25.43	51.75	36.48	44.29	80.35	68.18	74.40	39.17	31.69	35.52	26.59	25.11	25.87	18.01	21.53	19.73	164	146	155
1871—1875	26.43	15.35	21.02	47.90	30.44	39.37	82.98	52.66	68.17	31.93	33.18	32.54	32.98	24.95	29.06	21.46	22.76	22.10	169	133	152
1876—1880	26.04	16.91	21.60	46.59	33.08	40.02	75.02	58.33	66.91	37.03	31.81	34.49	29.62	24.24	27.01	30.82	21.21	26.15	172	135	154
1881—1885	25.83	19.85	22.85	43.91	34.27	39.11	72.80	57.68	65.26	31.47	21.98	26.74	26.06	18.43	22.26	21.60	19.14	20.38	152	117	134
1886—1890	30.26	21.38	25.88	46.54	32.66	39.69	76.81	52.40	64.76	27.97	25.61	26.81	27.28	19.50	23.44	23.84	21.85	22.86	155	119	138
1891—1895	29.47	21.06	25.17	50.00	35.72	42.92	88.43	61.07	74.92	35.32	27.19	30.51	26.32	20.28	23.33	21.60	20.28	20.95	171	128	150
1896—1900	25.80	20.04	23.00	44.88	35.08	40.11	80.66	66.74	73.88	40.33	30.06	35.33	30.57	28.47	29.51	26.01	16.40	21.44	177	141	160
1901—1905	30.20	27.54	28.90	54.49	45.56	50.11	85.31	70.56	78.09	30.20	22.03	26.20	23.06	17.37	20.27	17.14	18.22	17.67	155	128	142
1906—1910	30.72	17.58	24.29	47.57	32.27	40.08	73.39	52.08	62.96	17.28	17.36	17.32	16.64	14.46	15.57	11.94	13.80	12.85	119	97	109
1911—1915	30.12	22.00	26.16	45.52	33.48	39.74	69.40	48.00	58.95	16.29	13.81	15.08	18.07	12.17	15.19	13.39	11.47	12.45	117	85	101
1916—1920	21.49	17.48	19.52	36.41	28.97	32.74	54.36	43.33	48.96	14.66	8.09	11.43	11.88	8.09	10.01	11.12	5.74	8.47	92	65	78
1921—1925	25.33	17.25	21.26	35.24	25.75	30.47	52.22	34.00	43.05	7.05	5.92	6.48	6.01	5.40	5.70	6.26	5.40	5.83	71	50	61
1926—1930	23.58	13.66	18.80	32.33	21.06	26.90	41.08	27.61	34.58	7.42	4.55	6.03	5.30	4.55	4.94	5.04	4.83	4.94	58	41	50
1931—1935	15.61	16.91	16.25	25.33	26.58	25.95	32.69	34.44	33.40	4.71	3.62	4.17	2.06	6.34	4.17	4.12	3.62	3.87	43	48	45
1936	24.25	11.81	18.14	37.08	20.67	29.02	41.36	28.06	34.83	2.85	1.47	2.17	2.85	4.43	3.62	4.27	4.43	4.35	51	38	45

M.—Males F.—Females P.—Persons

reports, but it will bear repetition, because of the need of bringing home to the public the vital necessity for the provision of first-class attention, medical and nursing, for infants at their birth, as well as women at their confinements. This is the proper way in which to supplement the advantages of skilled ante-natal supervision, much of which can be wasted if supervision at the time of birth is deficient in quality.

I draw attention to the absence of Tuberculosis as a cause of death in infancy. Reference is made to this point in the section dealing with Tuberculosis.

Syphilis claimed no victims in 1936.

Suffocation in bed is now an infrequent occurrence and no instances occurred in 1936.

Convulsions is another cause of infant death which has practically disappeared. No doubt more accurate certification is responsible for much of this.

Diarrhœa, the great scourge of infancy in the 19th century and the beginning of this has been reduced practically to vanishing point.

I sum up this part of the case with the statement that 40 of the infant deaths in 1936 occurred in the first month of life and 22 in the remaining 11.

The following Table compares the group causes of death since 1891-1895.

Causes of Death	1891–1895.	1896–1900.	1901–1905.	1906–1910.	1911–1915.	1916–1920.	1921–1925.	1926–1930.	1931–1935.	1936.
7 Principal Zymotics ...	33 5	52 3	26 2	20.9	19 7	8 6	8 0	5.7	2 53	3 62
Other Infectious Diseases...	4.4	2 4	1 7	4 2	4 2	3 6	2 4	1 5	2 53	2 90
Tuberculosis	3 8	3 8	3 0	3 3	2 3	2 9	8	8	74	
Other General Diseases ...	8	2	5	6	6	5	5	5	89	
Diseases of Nervous System	12 3	10 6	10 2	7 8	5 8	4 9	3 5	1 5	89	
,, ,, Circulatory ,,	1	-	1		1	1		1	-	
,, ,, Respiratory ,,	26 1	24 1	22 2	16.0	18 4	15.3	11 5	8 7	7 90	10 88
,, ,, Digestive ,,	1 1	1 3	2	1 7	2 2	2 3	1 2	9	1 34	
,, ,, Genito-Urinary System	1	2	3	3	1	2		1		
,, ,, Skin & Cellular Tissue	8	1 4	1 3	.4	7	2	4	1	14	
Congenital Malformations	2.8	1 7	2 6	3 1	4 7	4 0	1 6	5 4	6 11	2 90
Prematurity, Atrophy, etc.	61 5	56 8	68 6	46 8	40 3	33.0	26 1	23 1	21.17	24 67
Violence	1 5	2 9	3 0	2 1	1 9	2 7	1 9	8	1 34	
All Others	1 5	2 1	7	1.2	6	3		4	14	
TOTAL ...	150	160	142	109	101	78	61	50	45	45

The predominant part played by Prematurity, etc., and the group of Respiratory Diseases is emphasised afresh in this comparison.

STILLBIRTHS.

I insert the usual Table about Stillbirths :—

Year	Males		Females		Infants	
	No.	%	No.	%	No.	%
1927	18	4.5	9	2.6	27	3.6
1928	38	4.8	23	3.4	61	4.1
1929	40	5.3	29	3.9	69	4.6
1930	42	5.2	26	3.6	68	4.5
1931	27	3.7	23	3.3	50	3.5
1932	30	4.2	16	2.2	46	3.2
1933	26	3.7	25	3.9	51	3.8
1934	28	4.1	30	4.5	58	4.3
1935	31	4.2	26	3.5	57	3.9
1936	24	3.3	23	3.3	47	3.3

The proportion of stillbirths in 1936 was therefore below the average of the last few years.

Our local figures appear to suggest that a higher proportion of stillbirths may be expected amongst illegitimates than legitimates, but the figures are very small. Nevertheless, for what they are worth, the facts are that since the middle of 1927, when the registration of stillbirths first came into force, the proportion of stillborn legitimate infants has averaged 3.92%, as compared with 5.12% for the illegitimate. The actual numbers of potential lives concerned were 12,903 legitimate and 547 illegitimate.

In the following Table the Ante-Natal (Stillbirths) and the Post-Natal (Live Births) Infant Mortality rates are shown together. The combination of the two about doubles the total infant mortality rate of the present day and gives a much more accurate indication of the true position than the ordinary infant death-rate.

Year	Death-rates of Infants								
	Males			Females			Infants		
	Ante-Natal	Post-Natal	Total	Ante-Natal	Post-Natal	Total	Ante-Natal	Post-Natal	Total
1928	48	59	106	34	35	68	41	48	89
1929	53	60	112	39	44	83	46	52	98
1930	52	45	96	36	37	73	45	41	85
1931	37	65	101	33	53	86	35	59	94
1932	42	32	74	22	57	79	32	45	76
1933	36	45	81	39	47	84	38	46	83
1934	41	50	91	45	42	87	43	46	89
1935	42	24	66	35	38	73	39	31	70
1936	33	51	84	33	38	71	33	45	78

NOTIFICATIONS OF INFECTIOUS DISEASE.

The following Table gives the numbers of notifications of Infectious Disease in 1936.

Diseases Notified	1926–1930.		1931–1935		1933		1934.		1935.		1936.	
	Nos.	Rate.	Nos.	Rate.	Nos.	Rate.	Nos.	Rate.	Nos	Rate	Nos.	Rate.
Chicken Pox ...	3596	8.43	1943	4.27	336	3.77	386	4.28	—	—	—	—
Diphtheria ..	472	1.10	914	2.01	135	1.51	90	.99	163	1.78	123	1.33
Scarlet Fever ...	983	2.29	1826	4.01	194	2.17	459	5.09	332	3.63	187	2.02
Pneumonia ...	484	1.13	435	.95	112	1.25	117	1.29	78	.85	78	.84
Erysipelas ...	140	.32	203	.44	54	.60	56	.62	29	.32	59	.63
Puerperal Fever ...	73	.17	100	.22	24	.27	22	.24	27	.29	13	.14
Puerperal Pyrexia	33	.07	41	.09	7	.08	12	.13	8	.09	9	.09
Ophthalmia Neonatorum ...	52	.12	59	.13	9	.10	17	.18	11	.12	10	.10
Enteric Fever ...	37	.08	63	.14	1	.01	2	.02	52	.57	3	.03
Malaria	3	.006	2	.004	1	.01	—	—	—	—	—	—
Dysentery ...	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis Lethargica ...	13	.03	7	.015	1	.01	—	—	1	.01	1	.01
Anterior Poliomyelitis	8	.018	2	.004	—	—	1	.01	—	—	—	—
Cerebro-Spinal Fever	10	.02	5	.011	1	.01	1	.01	1	.01	—	—
Acute Polio Encephalitis...	1	.002	1	.002	1	.01	—	—	—	—	—	—
Small Pox ...	1	.002	—	—	—	—	—	—	—	—	—	—
Continued Fever	—	—	1	.002	—	—	1	.01	—	—	—	—
TOTAL ...	5906	13.85	5602	12.49	876	9.83	1164	12.91	702	7.68	483	5.22

Chicken Pox is no longer notifiable.

There was thus a substantial decline in the notifications of Scarlet Fever, and a less marked diminution of those of Diphtheria.

The notification of Pneumonia continues to be unsatisfactory, with the exception of those really requiring Hospitalisation.

The Enteric Fever notifications returned to the normal.

No cases of Smallpox were notified in 1936.

THE PREVALENCE OF SCARLET FEVER.

Notification of Scarlet Fever began in Ipswich in 1891. Since the beginning of notification 10,038 cases have been notified, with 125 deaths, a case fatality of 1.2%. The death-rate over the whole period of 46 years averaged .03 per 1,000 living.

Periods.	Notifications.		Removals.		
	Numbers.	Attack Rates per 1,000 living.	Numbers.	Proportion per cent.	Case Fatality per cent.
1891—1900	2,654	4.29	993	37	1.9
1901—1910	1,126	1.60	880	78	1.3
1911—1920	2,683	3.51	2,070	77	1.6
1921—1930	1,562	1.87	1,423	91	.5
1891—1895	1,792	6.01	620	35	2.1
1896—1900	862	2.69	373	43	1.7
1901—1905	692	2.02	517	74	.8
1906—1910	434	1.20	363	83	2.1
1911—1915	2,065	5.45	1,513	73	1.8
1916—1920	618	1.59	557	90	.9
1921—1925	581	1.43	533	91	1.0
1926—1930	981	2.29	890	90	.3
1931—1935	1,826	4.08	1,699	93	2
1931	495	5.64	461	93	.6
1932	346	3.92	324	93	.3
1933	194	2.17	184	94	—
1934	459	5.11	421	91	—
1935	332	3.64	309	93	3
1936	187	2.02	169	90	—

A good deal of consideration has been given in previous reports to the epidemiology of Scarlet Fever, and emphasis has been laid on the fact that there have been three well-defined epidemic periods since the commencement of notification in 1891.

Two of these epidemics were characterised by their explosive violence. These were the epidemics of 1893-1894 and of 1914-1915.

The Borough is now emerging from the third epidemic period, which has lasted for eight years with exacerbations and remissions. The worst years in this series were 1931-1932 and 1934-1935.

This wave-like character is no new thing in prolonged epidemic periods as the death-rates in the prenotification era clearly indicate.

Our records show that there were repeated epidemics of a fatal type of Scarlet Fever between 1841 and 1885. Between 1886 and

1890 the reports of the Medical Officer of Health emphasise that the disease appeared to be almost absent from the town.

In 1891, the year notification came into force, the disease became more prevalent, but in a very mild form as compared with previous experience, and we have briefly noted the major epidemics that have occurred since that time.

If the experience of the notification period with low fatality be applied to that of the pre-notification period with high fatality, we find much the same type of thing in both cases Thus there were epidemics of explosive violence lasting a comparatively short time and characterised by their excessive density. The years 1863 and 1864 illustrate this type in an extreme degree. This epidemic lasted from the beginning of 1863 to the end of 1864, and was responsible for the appalling total of 229 deaths, 198 in 1863. This compares with the explosions of 1893-1894 and 1914-1915 in most respects except fatality.

This was by far the worst epidemic in our records and represents types of which we have no experience to-day.

There were no deaths from Scarlet Fever in 1865, a natural sequence of the experiences of 1863-1864.

The longer type of epidemic in the pre-notification era is illustrated by that of the years 1849-1852. This occurred in two waves, the first from the early part of 1849 to the end of 1850, and the second from the middle of 1851 to the end of 1852.

Another illustration of this wave distribution occurred between 1868 and 1872. There were again two waves, the first a short period from April, 1868, to February, 1869, and the second and much more severe from the middle of 1870 to the middle of 1872. This was followed by nearly two years' absence of fatality.

The last illustration of this type comprised a period of about five years. This again showed two definite waves, the first from the middle of 1874 to the middle of 1876 and the second from the middle of 1877 to the middle of 1879.

These examples will serve to illustrate the fact that epidemics of Scarlet Fever, studied over a period of 96 years, exhibit much the same characteristics in the pre-notification as in the notification era, except fatality.

The epidemic of Scarlet Fever in the new estates, which had been going on for several years, came to an end in the March quarter of 1936. This epidemic is well worthy of more than passing reference.

I have referred more than once to the fact that the part of the town most affected during the recent Scarlet Fever prevalence has been the new estates. These have all been built since the war and are by far the most sanitary areas of the Borough. There is no question as to water supplies, drainage, air space around and in the houses, and the facilities for food storage. Each house is provided with a bath so that personal cleanliness can be enjoyed.

I repeat that the question of insanitation does not arise in these estates.

If the contention, frequently heard, that insanitation is the cause of Scarlet Fever is true, then sanitation should abolish it. The answer is supplied by our new estates in terms so unequivocal that any person of average intelligence will appreciate it without difficulty.

The new estates epidemic began in the Nacton Estate area in 1927. It continued through 1928 but died down during 1929. It then recurred in the same area in 1930 and reached its second maximum in 1931. In 1932 and 1933 the epidemic in this area subsided, though prevalence continued considerably above the average. In 1934 a third wave occurred, the attack rate in the first half of that year reaching as high as 20.2 per 1,000 living. Thereafter it died down and prevalence became below average in the middle of 1935.

Thus prevalence in this area continued high for a prolonged period. It showed three waves. The first in 1927 showed a notification rate of 7.4 per 1,000 living, the second in 1931 of 16.2, and the third in 1934 of 20.2.

In 1931 the epidemic spread to the adjacent, but much more recent, Gainsborough Estate. In that year the notification rate rose to 7.4. Then it declined and in 1933 the rate in this particular estate fell below the average of the town. In 1934 prevalence shot up even higher than in the Nacton Estate in the same year. The epidemic continued with great density right through 1935 and came rather abruptly to an end in March, 1936.

These are the broad general facts.

They are of high interest epidemiologically and provide further evidence, if need be, of the fundamental truth of modern views on the epidemiology of Scarlet Fever. Environment is proved, I think, by these experiences to have no ætiological influence on the spread of Scarlet Fever. On the other hand the personal factor of spread from one person to another of infection via the naso-pharynges of infected persons, some of whom will subsequently prove the fact by becoming victims of the disease, whilst others escape and increase their immunity, becomes more and more firmly established.

In these new estates there were demonstrated repeatedly, street foci, independently of school infections. Yet the very people who were responsible for these street foci were loudest in calling for closure of schools, a procedure which experience has shown to be of no value in the prevention of epidemics of the kind under consideration.

It is well to note that a period of 10 years elapsed between the date of the first epidemic wave in this area and the last. During the whole period infection was circulating broadcast amongst the community awaiting its opportunity. Repeated school closures could have had no effect upon a widespread infection such as has been demonstrated in this area.

Infection of this kind is not confined to the school population, but is equally prevalent in those under school age and amongst those over it.

School closure cannot be considered in terms of the duration of Scarlet Fever Epidemics, and a little thought will show that short closures can have no influence on the types of thing we have to deal with in Scarlet Fever.

Scarlet Fever, in the form of the disease, is always present, which is another way of saying that its infection is always present.

This, again, is but another way of stating the fact that the infection is being maintained in the community by constant passage from person to person of all ages and condition in the community.

Only some of those infected prove the presence of the infection by developing the disease.

Every infected person, whether a sufferer from the disease or not plays his or her part in the maintenance of the circulation of the infection amongst the community and the whole circumstances of modern life provide the opportunities required to promote the spread of infection.

I give a Table showing the ward distribution of the notifications of Scarlet Fever in the Borough since 1931.

Scarlet Fever Notifications

Ward.	1931.	1932.	1933.	1934.	1935.	1936.	Total 1931—1936.
St Margaret's ...	86	75	23	45	38	31	298
St. John's ...	94	69	32	38	43	31	307
Alexandra ...	61	49	21	62	64	18	275
St. Clement's ...	138	47	42	250	159	66	702
Bridge	67	65	28	33	10	27	230
West	52	41	48	31	20	14	206
BOROUGH ...	498	346	194	459	334	187	2,018

The heavy incidence in the St. Clement's Ward is well brought out.

The cases which occurred in this particular ward were almost confined to the new estates.

Notification Rates of Scarlet Fever in the Wards of the Borough since 1931.

Wards.	1931.	1932.	1933.	1934.	1935.	1936.	1931—1936.
St Margaret's ...	5.55	4.79	1.46	2.83	2.35	1.90	3.13
St. John's ...	7.84	5.69	2.63	3.08	3.44	2.45	4.16
Alexandra ...	3.99	3.17	1.35	3.94	4.02	1.11	2.92
St Clement's ...	9.34	3.14	2.80	16.48	10.34	4.24	7.73
Bridge	4.42	4.24	1.82	2.12	.63	1.69	2.47
West	3.44	2.68	3.12	1.99	1.27	.87	2.21
BOROUGH ...	5.67	3.90	2.17	5.09	3.65	2.02	3.74

THE PREVALENCE OF DIPHTHERIA.

Notification of Diphtheria began in Ipswich in 1891. From that date to the end of 1936, 5,351 cases have been notified, or about half the number of cases of Scarlet Fever.

495 cases of Diphtheria have died, giving an average case fatality per cent. over the whole period of 46 years of 9.2%.

This compares unfavourably with the case mortality of Scarlet Fever in the same period, viz., 1.2%.

The facts with regard to the prevalence of Diphtheria since 1891 are set forth in the following Table :—

Periods.	Notifications.		Removals.		Deaths.
	Numbers.	Attack Rates per 1,000 living.	Numbers.	Proportion per cent.	Case Fatality per cent.
1891—1900	536	.88	33	6	29.3
1901 - 1910	791	1 12	461	58	12 9
1911—1920	1,779	2.33	1,618	90	7.1
1921—1930	1,208	1.45	1,167	96	4 3
1891—1895	273	91	12	4	37.7
1896—1900	263	.82	21	8	20 5
1901—1905	428	1 22	185	43	13.5
1906—1910	363	1.01	276	76	12.1
1911—1915	628	1.66	532	84	9.4
1916—1920	1,151	2.97	1,086	94	5.9
1921—1925	736	1.81	708	96	3.4
1926—1930	472	1 10	459	97	5.7
1931—1935	914	2.04	893	97	5.5
1931	348	3 97	336	96	6.9
1932	178	2.02	176	99	6.7
1933	135	1.51	132	98	5.1
1934	90	.99	88	97	6.6
1935	163	1 78	161	98	1.2
1936	123	1 33	118	96	5.0

If this Table be compared with the corresponding one for Scarlet Fever it will be seen that, in the 46 years comprised in the series, there have been only half as many cases of Diphtheria as Scarlet Fever but four times as many deaths. This expresses the position of the present day in a very striking form.

The period is sufficiently long and sufficiently recent to justify certain broad general inferences.

In the first place the infection of Diphtheria is shown as always present. There is no such thing as the disappearance of the infection of Diphtheria from our community. This point has been emphasised in previous reports, but it is a fact that will bear repetition. The evidence

of the presence of infection is the cases that occur. Viewed from this angle the subjoined Table is of interest :—

Diphtheria Notification Rates.

Ward	1931.	1932.	1933.	1934.	1935.	1936.	Average.
St Margaret's ...	2 00	2 04	82	1.19	2 66	2.33	1 85
St. John's ...	6 00	4 29	.98	1.62	1.84	87	2 57
Alexandra ...	7 58	2 20	1 35	95	1 69	1 05	2 44
St. Clement's ...	4 74	1.47	.53	1 05	2 08	.96	1 79
Bridge	2 77	1 63	4 68	57	1 01	1.00	1.93
West	1 12	85	.58	70	1 39	1.38	t 05
BOROUGH ...	3 96	2.00	1 51	.99	1 78	1 33	1.92

Here it is shown that throughout the whole period of six years cases of Diphtheria have been notified from every district of the Borough indicating the continued presence of the infection of the disease broadcast amongst the community, children and adults, in each separate district. From time to time prevalence has been high in particular areas, as for example in the St. John's district, St. Clement's and Alexandra in 1931, St. John's again in 1932, Bridge in 1933.

In 1934 there was low disease incidence throughout the whole Borough.

In 1935 the disease was more frequent in St. Margaret's and St. Clement's, and in 1936 St. Margaret's was again chiefly affected, though at no time was the attack rate exceptionally high.

It is notable that throughout the whole period the Westgate Ward comes out with much the lowest notification rate. With the exception of the Alexandra Ward the average experience of the other four Wards is remarkably similar.

The isolated position of Ipswich renders it an area in which the field epidemiologist can find many fruitful opportunities for the observation of the behaviour of epidemic diseases. It may be that the term isolated has only a limited application in these days of rapid transport, and it is true that there is very close contact with London.

It has been argued that if there is the infection of any disease in constant circulation in an area, then the time should come when the whole community of that area should become immune and cases of the disease rarities.

But, of course, such a community does not exist, because every community is constantly being reinforced by the arrival of new individuals by birth and immigration.

The new generations have, during the first 9 or 10 months of life a high degree of resistance to infections such as Scarlet Fever and Diphtheria. Thereafter they become susceptible to the influence of any form of infection in circulation in the community, and it is a fact that

individuals at ages from 2 years to 10 provide the vast majority of the cases of diseases such as Scarlet Fever and Diphtheria. After 10 years of age the attack-rate diminishes rapidly, not because the individuals at these higher ages have become immune as a result of an attack of the disease, but far more often because they have been immunised sufficiently by repeated doses of infection derived from the reservoir of the circulating infection to which such constant reference has been made.

The case of immigrants is different. Some of these come from other towns and such persons may be expected to have the average degree of immunity possessed by the community of the area from which they have come.

A large number of Ipswich immigrants come from the surrounding villages and rural areas of the country. These people have, in consequence of having been brought up in isolated communities in which there is no constantly circulating infection, low resistance to the common infections of townspeople. When therefore they are brought into contact with town infections they have insufficient resistance to enable them to overcome any but minimal doses of infection. In consequence these immigrants provide an undue proportion of the older victims of Diphtheria, Scarlet Fever, etc.

ENTERIC FEVER.

True Enteric Fever appears to be extinct at least in the town. Instead the cases are Paratyphoid B.

Three such cases were notified in 1936.

They occurred quite sporadically, at widely separated periods of the year, one in February, one in May, one in October.

They did not appear to be related either to one another or anything else.

The following Table explains itself :—

Periods.	Notifications.		Removals.		Case Fatality per cent.
	Numbers.	Attack Rates per 1,000 living.	Numbers.	Proportion per cent.	
1891—1900	938	1.51	376	40	12.8
1901—1910	485	.69	388	80	16.1
1911—1920	77	.10	62	80	7.7
1921—1930	71	.08	58	81	7.0
1891—1895	383	1.28	130	34	14.3
1896—1900	555	1.73	246	44	11.7
1901—1905	380	1.11	297	78	17.1
1906—1910	105	.29	91	86	12.4
1911—1915	56	.14	46	82	5.3
1916—1920	21	.05	16	76	14.3
1921—1925	34	.08	28	82	8.8
1926—1930	37	.08	30	81	5.4
1931—1935	63	.14	57	92	1.6
1931	3	.03	3	100	
1932	5	.05	5	100	20.0
1933	1	.01	1	100	—
1934	2	.02	2	100	—
1935	52	.57	46	90	—
1936	3	.03	3	100	—

TUBERCULOSIS.

NOTIFICATIONS OF TUBERCULOSIS SINCE 1909.

I reproduce the usual Table showing the number of cases of Tuberculosis notified in Ipswich since the beginning of notification :—

Year	Pulmonary			Non-Pulmonary			All Forms.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.
1909	41	23	64	—	—	—	41	23	64
1910	29	15	44	—	—	—	29	15	44
Average	35	19	54	—	—	—	35	19	54
1911	75	57	132	—	—	—	75	57	132
1912	178	152	330				178	152	330
1913	112	88	200	58	52	110	170	140	310
1914	98	58	156	18	23	41	116	81	197
1915	60	56	116	18	20	38	78	76	154
1916	91	77	168	19	17	36	110	94	204
1917	77	78	155	18	12	30	95	90	185
1918	81	97	178	16	18	34	97	115	212
1919	82	82	164	26	39	65	108	121	229
1920	70	67	137	39	36	75	109	103	212
Average	92.4	81.2	173.6	21.2	21.7	42.9	113.6	102.9	216 5
1921	173	131	304	41	35	76	214	166	380
1922	90	65	155	23	21	44	113	86	199
1923	72	61	133	38	36	74	110	97	207
1924	72	69	141	24	28	52	96	97	193
1925	72	74	146	34	32	66	106	106	212
1926	55	68	123	41	35	76	96	103	199
1927	68	59	127	26	27	53	94	86	180
1928	72	69	141	20	24	44	92	93	185
1929	63	69	132	25	32	57	88	101	189
1930	62	54	116	19	26	45	81	80	161
Average	79 9	71.9	151 8	29 1	29 6	58 7	109.0	101 5	210.5
1931	69	63	132	24	23	47	93	86	179
1932	70	75	145	19	28	47	89	103	192
1933	80	82	162	21	19	40	101	101	202
1934	92	88	180	20	29	49	112	117	229
1935	76	81	157	16	13	29	92	94	186
1936	77	71	148	12	18	30	89	89	178

Thus the notifications of Tuberculosis show no signs of increase, in fact the reverse.

The most striking feature of this Table is the continued small number of cases of Non-Pulmonary Tuberculosis.

The notification rates are set forth thus :—

Periods	Pulmonary			Non-Pulmonary.			All Forms.		
	M.	F.	P.	M.	F	P.	M.	F.	P.
1911 -1920	2 55	2 01	2 27	.58	.54	.56	3 13	2.55	2.83
1921 -1930	2 03	1 63	1 82	74	67	.70	2.77	2 30	2.52
1931 1935	1 83	1 64	1.73	.47	.47	.47	2.31	2.12	2.21
1931	1 66	1 36	1 50	.58	49	.53	2.24	1 85	2 03
1932	1.68	1 61	1.64	.45	.60	.53	2.13	2 21	2 17
1933	1.90	1.74	1 82	.50	.40	.45	2 40	2 14	2.27
1934	2 16	1.84	1 99	.46	60	.54	2.63	2 45	2.54
1935	1 76	1 68	1 72	37	27	.32	2.13	1.95	2.04
1936	1.76	1 45	1 60	.27	36	32	2.03	1.82	1.92

Thus the figures for the year 1936 compare more than favourably with those of previous years.

AGE AND SEX DISTRIBUTION OF THE NOTIFICATIONS OF TUBERCULOSIS, 1936.

Age.	Pulmonary.			All other forms			Total 1936.			Total 1935.
	M	F.	P.	M	F.	P	M.	F.	P	Persons
1	—	—	—	—	—	—	—	—	—	—
1 5	—	—	—	2	1	3	2	1	3	10
5 10	16	13	29	4	7	11	20	20	40	19
10 15	4	10	14	3	3	6	7	13	20	19
15 20	5	8	13	—	2	2	5	10	15	27
20 25	6	7	13	1	2	3	7	9	16	18
25 35	15	18	33	1	1	2	16	19	35	43
35 45	13	8	21	1	—	1	14	8	22	21
45 55	12	4	16	—	2	2	12	6	18	19
55 65	6	2	8	—	—	—	6	2	8	9
65+		1	1	—	—	—		1	1	1
Total	77	71	148	12	18	30	89	89	178	186

The age distribution shown in this Table has some interesting features.

In the first place the notifications above 20 years of age are about average.

In the second place the notifications between 5 and 10 years are considerably above the average.

In the third place the freedom from Tuberculosis of Infants under one year continues.

In the fourth place the incidence of Pulmonary Tuberculosis under 5 years of age continues to be notably low on the average. There have only been 10 cases of Pulmonary Tuberculosis notified under 5 years of age during the last seven years.

PRINCIPAL SITES OF TUBERCULOSIS.

The following Table shows the number of cases of the different varieties of Tuberculosis, notified since 1921 :—

Situation of Disease.	Average 1921—1925	Average 1926—1930	Average 1931—1935	1934	1935	1936
Pulmonary ...	175 6	127 8	155.2	180	157	148
Abdominal ...	7 6	8 6	4 4	5	6	4
Cerebral ...	5 2	6 0	5.4	5	3	3
General ...	0 6	0 2	—	—	—	-
Bones and Joints	19 6	13 4	8.0	9	7	3
Glands ...	17 2	20 4	21.4	28	11	15
All other forms of T B	12 4	6 0	3 2	2	2	5
TOTAL ...	238 2	182 4	197 6	229	186	178

The decline in the number of notifications of Tuberculosis of Bones and Joints is a very notable feature of this Table.

It has been in evidence for a good many years, and there appears to be no doubt that it is real.

The notifications of Glandular Tuberculosis have always been unsatisfactory.

TUBERCULOSIS SURVIVAL TABLE CORRECTED TO DECEMBER 31st, 1936.

The number of persons notified as suffering from the various forms of Tuberculosis and known to have survived on December 31st, 1936, is shown as follows :—

Sex		Pulmonary	Non Pulmonary.	All Forms
Males		812	308	1120
Females		778	333	1111
Persons		1590	641	2231
Persons	1935	1534	632	2166
	1934	1454	634	2088
	1933	1367	603	1970
	1932	1273	608	1881
	1931	1225	576	1801
	1930	1194	566	1760
	1929	1179	529	1708
	1928	1145	506	1651
	1927	1092	527	1619
	1926	1095	484	1579

Thus the number of survivors amongst the Pulmonary group has increased by 500 in ten years.

In this relation the acute types of Pulmonary Tuberculosis are no longer common.

Again the early case of Pulmonary Tuberculosis seldom presents himself at the Dispensary, though cases may be found on examination of contacts. In practice, however, the doctor is not consulted until the person finds he is not well. The case may not then be recognised as Tuberculosis, and time in consequence is lost before the true nature of the case is recognised.

When the patient does arrive at the Dispensary, more often than not his X-Ray will reveal that the lesion is an old one and the so-called onset is in reality a recrudescence.

To my mind the rarity of acute Tubercle of the Lung and the frequency with which old T.B. scars can be found in the lungs of persons presenting themselves for examination for the first time, viewed in conjunction with the demonstrated decline in the death-rates from all varieties of Tuberculosis, point, quite definitely to the conclusion, so often stressed in these Reports, that we are slowly but steadily producing a race that will ultimately become immune to Tuberculosis.

There are other arguments in support of this view, but these will suffice on this occasion.

TUBERCULOSIS DISPENSARY.

The number of cases on the Dispensary Register (as distinct from the Notification Register) at December 31st, 1936, was 853.

This figure includes only those cases presenting themselves at the Dispensary during the last two years.

772 X-Ray examinations were carried out during 1936.

The Tuberculosis Officer paid 16 visits to the homes of patients, and, in addition, furnished Practitioners with 213 written reports upon patients sent him for examination.

Year.	No. of Patients attending Dispensary.	No. of Visits paid by Patients.	No. of Visits to Homes by Nurse.
Average			
1921—1925	569	3000	2622
1926—1930	587	2331	3171
1931—1935	689	2485	3526
1932	646	2734	3128
1933	760	2817	3641
1934	747	2514	3775
1935	713	2204	3592
1936	802	2924	3240

There was a considerable increase in the number of X-Ray examinations in 1936.

The old X-Ray apparatus, which was quite out of date, was replaced by new and up-to-date equipment during the year.

INSTITUTIONAL TREATMENT OF TUBERCULOSIS.

(1) GENERAL.

During the year 218 patients were admitted to Institutions for the treatment of Tuberculosis, 190 were discharged, and 27 died.

With regard to the cases discharged from Institutions, the following summary of the results of treatment is furnished by the Medical Superintendents :—

Condition at time of discharge.	No. of cases			
	Pulmonary.	Other Forms of Tuberculosis	Others.	Total.
Quiescent	72	6	—	78
Not Quiescent	30	7	—	37
Observation only	—		27	27
Poor-Law Institution ...	19	5	—	24
In Institutions under 28 days	13	11	—	24
TOTAL	134	29	27	190

(2) IPSWICH SANATORIUM.

Dr. W. F. Sutcliffe, the Medical Superintendent of Ipswich Sanatorium, supplies the following report for 1936 :—

PATIENTS TREATED TO A CONCLUSION DURING 1936.

There were 222 patients discharged and left during 1936 Of these, 2 men (Ipswich), 3 women (1 of them Ipswich), and 9 children (all Ipswich) stayed less than 28 days and are not included in the Classification Tables.

203 cases of Pulmonary Tuberculosis were treated to a conclusion. The whole of these, including Ipswich patients, are shewn in Table 1. 102 of these cases were Ipswich patients and are shewn also separately in Table 2.

5 observation cases were found to be Non-Tuberculous.

Of the patients discharged as " Not Quiescent " under Ministry of Health classification, many were much improved as a result of their stay in the Sanatorium.

W. F. SUTCLIFFE,
Medical Superintendent.

23rd June, 1937.

OBSERVATION CASES

For Pulmonary Tuberculosis	Diagnosis on Discharge from Observation	Stay under 4 Weeks			Stay over 4 Weeks			Totals		
		M	W	C	M	W	C	M	W	C
Totals ...	Tuberculous ...	—	—	2	—	—	1	—	—	3
	Non-Tuberculous ...	—	—	1	3	—	1	3	—	2
	Doubtful ...	—	—	—	—	—	—	—	—	—
3		—	—	3	3	—	2	3	—	5

CLASSIFICATION OF ALL PATIENTS TREATED TO A CONCLUSION IN 1936.

TABLE "1."

Classification on Admission		Condition at time of Discharge	Duration of Residential Treatment: Under 3 Months			3—6 Months			6—12 Months			More than 12 Months			Totals			Grand Totals
			M	W	C	M	W	C	M	W	C	M	W	C	M	W	C	
Pulmonary Tuberculosis	Class T.B. Minus	Quiescent ...	—	—	3	16	23	11	4	12	25	—	—	7	20	35	46	101
		Not Quiescent	1	1	1	—	—	—	—	1	—	—	—	—	1	2	1	4
		Died in Institution ...	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	1
	Class T.B. Plus Group 1	Quiescent ...	—	—	—	—	3	—	—	2	1	1	—	—	1	5	1	7
		Not Quiescent	—	1	—	—	2	—	—	—	—	—	—	—	—	3	—	3
		Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class T.B. plus Group 2	Quiescent ...	—	—	—	3	4	—	4	3	—	1	1	—	8	8	—	16
		Not Quiescent	1	—	—	5	5	—	7	9	—	2	1	—	15	15	—	30
		Died in Institution ...	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	1
	Class T.B. plus Group 3	Quiescent ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Not Quiescent	3	3	1	5	10	—	4	5	1	1	—	1	13	18	3	34
		Died in Institution ...	1	1	—	3	—	—	—	1	—	—	—	—	4	2	—	6

CLASSIFICATION OF IPSWICH PATIENTS TREATED TO A CONCLUSION IN 1936.

TABLE "2."

Classification on Admission.		Condition at time of Discharge.	Duration of Residential Treatment.															Grand Totals.
			Under 3 Months.			3–6 Months.			6–12 Months.			More than 12 Months.			Totals.			
			M	W	C	M	W	C	M	W	C	M	W	C	M	W	C	
Pulmonary Tuberculosis.	Class T.B. Minus.	Quiescent ...	—	—	3	12	12	10	1	7	21	—	—	5	13	19	39	71
		Not Quiescent	1	1	1	—	—	—	—	1	—	—	—	—	1	2	1	4
		Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class T.B. Plus Group 1.	Quiescent ...	—	—	—	—	2	—	—	—	—	—	—	—	—	2	—	2
		Not Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class T.B. Plus Group 2.	Quiescent ...	—	—	—	2	1	—	3	—	—	—	—	—	5	1	—	6
		Not Quiescent	—	—	—	3	3	—	2	4	—	—	—	—	5	7	—	12
		Died in Institution ...	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	1
	Class T.B. Plus Group 3.	Quiescent ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Not Quiescent	—	—	—	1	1	—	—	2	—	—	—	—	1	3	—	4
		Died in Institution ...	1	—	—	1	—	—	—	—	—	—	—	—	2	—	—	2

OBSERVATION CASES.

For Pulmonary Tuberculosis	Diagnosis on Discharge from observation	Stay under 4 Weeks.			Stay over 4 Weeks.			Totals.		
		M	W	C	M	W	C	M	W	C
	Tuberculous ...	—	—	—	—	—	1	—	—	1
	Non-Tuberculous	—	—	1	—	—	1	—	—	2
	Doubtful ...	—	—	—	—	—	—	—	—	—
	Totals ...	—	—	1	—	—	2	—	—	3

(3) EAST SUFFOLK AND IPSWICH HOSPITAL.

The following Table gives the number of Patients suffering from Surgical Tuberculosis who have been treated at the East Suffolk and Ipswich Hospital since 1925 :—

Year.	Remaining from Previous Year	Admitted.	Treated.	Discharged.	Deaths.	Remaining.
1925	12	44	56	45	3	8
1926	8	53	61	48	2	11
1927	11	29	40	36	2	2
1928	2	26	28	22	6	—
1929	—	21	21	19	1	1
1930	1	21	22	20	1	1
1931	1	24	25	18	—	7
1932	7	16	23	19	—	4
1933	4	32	36	31	—	5
1934	5	28	33	32	—	1
1935	1	23	24	17	4	3
1936	3	17	20	13	2	5

In general terms the number of cases of Surgical Tuberculosis is decreasing in this area.

(4) IPSWICH ISOLATION HOSPITAL.

(a) Treatment of Surgical Tuberculosis.

Year.	Remaining from Previous Year.	Admitted.	Treated.	Discharged.	Deaths.	Remaining.
1925	—	10	10	3	—	7
1926	7	6	13	4	1	8
1927	8	30	38	17	1	20
1928	20	20	40	23	3	14
1929	14	35	49	26	4	19
1930	19	32	51	34	2	15
1931*	15	2	17	17	—	—
1932*	—	19	19	—	—	19
1933	19	16	35	24	3	8
1934	8	8	16	4	—	12
1935	12	2	14	7	—	7
1936	7	10	17	12	1	4

*Ward closed from 21st January, 1931, to 14th October, 1932.

The chief value of this unit is the relief of beds in the Ipswich and East Suffolk Hospital. Apart from this, the South Ward of the Isolation Hospital is peculiarly suited for the prolonged periods of treatment required by these patients.

(b) TREATMENT OF ADVANCED TUBERCULOSIS.

Year	Remaining from previous Year.	Admitted	Treated.	Discharged	Deaths.	Remaining
1925	18	62	80	35	24	21
1926	21	60	81	39	25	17
1927	17	53	70	28	28	14
1928	14	62	76	22	27	27
1929	27	46	73	24	25	24
1930	24	65	89	34	27	28
1931*	28	19	47	36	11	—
1932	—	35	35	8	8	19
1933	19	48	67	32	18	17
1934	17	53	70	32	22	16
1935	16	59	75	35	20	20
1936	20	56	76	32	21	23

*Ward closed from 8th August, 1931, to 11th May, 1932.

This unit in the local service continues to fulfil its useful function not only in the conferment of individual benefit but in the prevention of the spread of the disease by making it possible to remove advanced cases from the midst of families, and provide treatment for them under suitable conditions.

DENTAL WORK IN CONNECTION WITH TUBERCULOSIS.

I beg to report on the dental treatment of Tuberculosis for the year ending 31st December, 1936.

	Males.	Females.	Total.
Number inspected at Clinic	46	39	85
.. .. .. Isolation Hospital ...	2	2	4
.. of visits to Isolation Hospital ...	—	—	3
.. .. cases treated	19	29	48
.. .. attendances made	113	136	249
.. .. teeth extracted	99	106	205
.. .. Local Anæsthetic cases ...	26	30	56
.. .. Nitrous Oxide administrations ...	4	8	12
.. .. fillings in permanent teeth ...	19	40	59
.. .. teeth filled	18	38	56
.. .. dressings, etc.	119	178	297
.. .. patients for whom dentures were fitted	2	7	9

Of the 85 cases inspected, 40 were awaiting admission to the Ipswich Sanatorium and 2 the Borough Isolation Hospital.

18 insured persons entitled to dental benefit under the National Health Insurance Scheme were referred to private practitioners for treatment.

(Signed) T. A. EDMONDSON,
Dental Surgeon.

REPORT BY DR. R. PHILPOTT, CLINICAL TUBERCULOSIS OFFICER, ON THE SPECIAL WORK CARRIED OUT IN CONNECTION WITH THE TUBERCULOSIS SCHEME.

Artificial Pneumo-thorax.

Collapse of the lung by the introduction of air into the pleural cavity between the chest wall and the lung is the rational and most successful method of treating Pulmonary Tuberculosis when the extent of the disease permits of it being used. The initial induction is done in a Sanatorium or Hospital and later on the patient is able to return to work and come up periodically for a refill of air.

With a view to preventing unnecessary loss of time from work and having to ask leave of their employers, refills are now a part of the routine work of the Dispensary.

Tuberculin Injections.

These are useful in the chronic type of Tuberculosis tending towards fibrosis, and also in cases of enlargement of the glands of the neck.

A large number of injections have been given in 1936, and patients attend for these on Saturday mornings.

Collosol Calcium.

These injections also are given at the Dispensary on Saturdays.

Sanocrysin Injections.

Sanocrysin is extremely useful in selected cases, but the patient has to be under the closest observation. For that reason these injections are not given at the Dispensary.

A few cases in the Chest Ward at the Isolation Hospital have been treated with Sanocrysin and have done extremely well. Owing to the advanced type of most of the cases in this Ward, it is impossible to employ Sanocrysin on a large scale.

The Mantoux Test for Tuberculosis has been employed on a few children. It is hoped to make this a routine method of investigation later on.

The test is useless in adults as practically all adults over the age of twenty-five have been infected with Tuberculosis and would show a positive reaction.

Fluoroscopy.

Now that a new X-Ray apparatus has been installed, examinations of the chest by means of the Fluorescent Screen are constantly made.

It is extremely useful both in differential diagnosis of Tuberculosis and in the control of cases who are having Pneumo-thorax treatment.

MATERNITY AND CHILD WELFARE.

MATERNITY WELFARE.

Clinics held under the Maternity and Child Welfare Scheme under the personal supervision of the Assistant Medical Officer (Dr. Doris E. P. Jolly).

The new Branch Clinic in Clapgate Lane was opened on April 16th, 1936, and enabled Ante and Post-Natal Clinics to be established therein to serve the district comprising the new Housing Estates.

The Clinics at the Public Health Department were reorganised, and the following Ante and Post-Natal Clinics are now available.

Public Health Department, Elm Street.—Tuesday, Thursday and Friday mornings.

Branch Clinic, Clapgate Lane.—Monday and Wednesday mornings

ANTE-NATAL CLINICS.

The following Table gives the numbers examined and the total examinations by the Medical Officer (Dr. Jolly):—

Year.	Main Clinic.			Branch Clinic.			Total Examinations.
	Cases Examined.	Re-examinations.	Total.	Cases Examined.	Re-examinations.	Total.	
1924	27	18	45	—	—	—	45
1925	61	65	126	—	—	—	126
1926	123	81	204	—	—	—	204
1927	206	71	277	—	—	—	277
1928	290	115	405	—	—	—	405
Average	141	70	211	—	—	—	211
1929	311	343	654	—	—	—	654
1930	447	687	1134	—	—	—	1134
1931	476	656	1132	—	—	—	1132
1932	679	1016	1695	—	—	—	1695
1933	747	1122	1869	—	—	—	1869
Average	532	765	1297	—	—	—	1297
1934	751	1328	2079	—	—	—	2079
1935	825	1531	2356	—	—	—	2356
1936	681	1306	1987	147	430	577	2564

The figures for Branch Clinic represent part of the year only.

POST-NATAL CLINICS.

Year.	Main Clinic.			Branch Clinic.			Total Examinations.
	Cases Examined.	Re-examination.	Total.	Cases Examined.	Re-examinations.	Total.	
1924	—	—	—	—	—	—	—
1925	—	—	10	—	—	—	10
1926	—	—	48	—	—	—	48
1927	52	43	95	—	—	—	95
1928	67	66	133	—	—	—	133
Average	—	—	—	—	—	—	—
1929	79	63	142	—	—	—	142
1930	92	44	136	—	—	—	136
1931	104	44	148	—	—	—	148
1932	63	32	95	—	—	—	95
1933	61	22	83	—	—	—	83
Average	80	41	121	—	—	—	121
1934	70	22	92	—	—	—	92
1935	73	29	102	—	—	—	102
1936	69	34	103	27	8	35	138

The figures for Branch Clinic represent part of the year only.

These figures show how difficult it is to get the Post-Natal habit established.

ANTE AND POST-NATAL CLINICS.—DEFECTS FOUND.

The examinations carried out at the Ante-Natal and Post-Natal Clinics revealed the following defects :—

Defect.	Ante-Natal.			Post-Natal.		
	Main Clinic.	Branch Clinic.	Total.	Main Clinic.	Branch Clinic.	Total.
Albuminuria	22	5	27	—	—	—
Anæmia	2	1	3	1	—	1
Breast Disorders ...	—	—	—	6	—	6
Contracted Pelvis ...	4	—	4	—	—	—
Debility	—	—	—	5	2	7
Dental Caries	295	90	385	16	8	24
Disease of Heart ...	8	2	10	—	—	—
Dyspepsia	2	1	3	—	—	—
Gynæcological Disorders	7	3	10	27	9	36
Hæmorrhage	9	1	10	—	—	—
Hæmorrhoids	2	1	3	—	2	2
Malpresentation ...	—	—	—	—	—	—
Neuralgia	1	—	1	—	—	—
Oedema	3	2	5	1	—	1
Ophthalmic Disorders ...	1	3	4	—	—	—
Respiratory Diseases ...	8	2	10	—	—	—
Skin Disorders ...	2	1	3	2	1	3
Tuberculosis	1	1	2	—	—	—
Varicose Veins ...	102	32	134	—	—	—
All others	32	9	41	1	1	2
TOTAL	501	154	655	59	23	82

REPORT BY THE MEDICAL OFFICER IN CHARGE OF THE ANTE AND POST-NATAL CLINICS.

826 women were in attendance at the two clinics for Maternal Welfare in 1936.

During the year 683 births took place amongst mothers who had made one or more attendances at the Ante-Natal Clinics. This number represents some 87% of the total midwife deliveries in the town.

For the last eight months of the year the women residing in the area attended the new Gainsborough Clinic. As this is at present a somewhat smaller clinic with the dental department adjoining the ante-natal, it has been found possible to arrange for a routine dental examination of all expectant mothers prior to the medical; whereas at Elm Street, with its larger numbers, only some cases usually can be persuaded to wait their turn for dental inspection and advice, and many refuse to be taken across to that department at all. For this reason it is interesting to compare the records of the two dental clinics. At Gainsborough the routine inspection showed that over 90% of the cases seen had some defect, but only just over a third of these would permit treatment, whereas at Elm Street, where largely only the worst cases, who have already experienced toothache, will trouble to see the dentist, two-thirds accepted treatment. This high percentage of refusals following routine inspection shows how little the value of preservation of teeth to the general physical well being is appreciated by these modern young mothers, and how difficult it is to eradicate their fixed but erroneous idea that "no pain" means no need for treatment. Few of these women have ever troubled to see a dentist since school leaving age, except for relief of severe toothache, and by the time they reach the Ante-Natal Clinic the wastage of teeth revealed is appalling, since in 1936 the total number of teeth extracted for these young mothers in the prime of life was nearly four times as great as those which could still be filled and saved.

It is to be hoped that the general increased interest in physical culture for adults will result in increased utilisation of all available means for keeping fit—even dental!

Maternal Mortality.

Three women who had been seen at the clinic during the year were subsequently admitted to the East Suffolk Hospital and died; this is the highest number which has yet occurred, and brings the total maternal deaths for the approximately 5,500 cases supervised up to 5, a mortality rate of nearly 1 per thousand.

The causes of death were as follows:—

(1) Eclampsia in a young primipara, who was found at her first and only attendance at the clinic to be in a condition of severe toxæmia. She was admitted to hospital within a few hours.

(2) Ante-partum hæmorrhage in a multipara X. At her last attendance no symptoms of toxæmia were found.

(3) Post-partum hæmorrhage and retained placenta in a multipara II. No abnormality found ante-natally, previous confinement normal.

MATERNAL MORBIDITY.

89 cases were referred by letter to their own doctor or the hospital for illness or abnormality. 15 of these were for some post-natal disability. 9 were cases of sterility.

66 cases were referred during the pregnancy. 20 were cases of albuminuria or toxæmia, many of which were admitted to and delivered in hospital.

6 were cases of threatened abortion.

6 were cases in which contracted pelvis or fœtal disproportion was suspected.

5 were cases of urinary tract infection.

There were in addition cases of malpresentation, tumours, cardiac, orthopædic, ophthalmic and nervous disorders.

FOETAL MORTALITY.

15 infants were stillborn, a rate of 2.2%. Of these prematurity was present in 4 cases, difficult labour or fœtal abnormality in 3, twin birth in 1 case, and in 3 cases the infant was born before the arrival of the midwife.

D. E. P. JOLLY.

IPSWICH MATERNITY HOME.

I append a Table which shows the admissions since the opening of the Home in July, 1918:—

Year.	Cases admitted from			Total No of Days.	Average duration of stay in days.	Per cent of Total Ipswich Births.
	Ipswich.	Outside Areas.	Total.			
1919—1920	144	18	162	2,112	13.0	4.2
1921—1925	356	61	417	4,732	11.3	4.7
1926—1930	560	133	693	7,521	10.9	7.8
1931—1935	1171	223	1394	14,739	10.6	17.7
1926	71	15	86	935	10.8	4.6
1927	87	15	102	1,154	11.3	6.2
1928	114	27	141	1,562	11.1	8.2
1929	136	31	167	1,803	10.8	9.6
1930	152	45	197	2,067	10.5	10.6
1931	169	50	219	2,296	10.5	12.2
1932	200	33	233	2,494	10.7	14.3
1933	208	34	242	2,580	10.7	15.8
1934	258	56	314	3,285	10.5	20.5
1935	336	50	386	4,084	10.6	23.3
1936	311	57	368	3,846	10.4	22.1

64.9 per cent. of the women were confined by the midwives at the Home.

In 60 cases, or 25 per cent., medical assistance was sought, in 10 cases during labour, in 38 after labour, and in 12 for the infant.

One case of Puerperal Fever and seven of Puerperal Pyrexia were notified during the year.

There were no maternal deaths, but 8 infants died under 10 days, 6 infants were stillborn, and there was one miscarriage.

The monthly admissions are given below :—

January	 33	July	...	...	28
February	 26	August	...	...	35
March	 31	September	...	...	27
April	 43	October	...	...	23
May	 28	November	...	...	32
June	 29	December	...	...	33

This gives an average monthly number of 30 as compared with 32 in 1935.

It is apparent from these figures that the existing Home is taxed to capacity from time to time. This is inevitable under the peculiar conditions governing admissions to hospitals of this type. The work comes in rushes so that they are either too busy or only half full, but they should be sufficiently large to meet a maximum demand. Our Maternity Home no longer meets our maximum requirements and in consequence it is necessary to embark on the provision of a still larger Home. The popularity of the existing Home proves that it fills a public need.

In my opinion this new Maternity Home might well be one of the units of the Group Hospital envisaged in my special report on the future of the Municipal Hospital.

The expansion of the nursing services administered by the Committee of the Ipswich Nurses' Home has made the existing Home too small for the number of nurses required to carry on the various branches of nursing undertaken, and the Committee is faced with the urgent need for more accommodation.

The premises of the existing Maternity Home at Brook Street would provide altogether suitable rooms for a substantial addition to the nursing staff of the Home.

I suggest therefore the provision of a new Maternity Home in the neighbourhood of Heathfields and the detailing of the Brook Street institution for the use of the community of the Nurses' Home upon agreed terms.

MIDWIVES ACTS, 1902 AND 1918.

The number of midwives on the Local Roll at the close of 1936 was 18, and of these 6 were connected with the Ipswich Nurses' Home, Lower Brook Street, and 4 with the Ipswich Maternity Home.

The Ipswich cases attended by midwives amounted to 795, a figure which is made up as under :—

At Maternity Home	200
District Cases attended by Midwives from Ipswich Nurses' Home	281
Unattached or Outside Midwives	314

The midwives attended 56% of the births registered during the year.

A scheme under the Midwives Act of 1936 has been prepared and approved by the Corporation and the Ministry of Health.

The essential feature of the scheme is that the establishment of a service of municipal midwives and maternity nurses must entail as little disturbance of existing conditions as possible.

In order to accomplish this end, the Domiciliary Midwifery service provided by the committee of the Ipswich Nurses' Home will be taken over by the Corporation, who will continue to work the service from the Home until it is found necessary to alter the arrangement by stationing midwives outside.

In addition, the three outside midwives, who do practically the whole of the remainder of the cases not attended by the midwives of the Nurses' Home, will be included in the municipal service

In this way the change-over to a municipal midwifery service will be accomplished with the minimum of dislocation of the existing services.

The Table shows the number of cases in which the midwives required medical help :—

Year.	Notifications received.			Percentage of Births attended by Midwives in which Medical Help was called in.
	On behalf of Mother.	On behalf of Child.	Total.	
1921-1925	320	164	484	12.5%
1926-1930	372	174	546	12.5%
1931-1935	494	197	691	17.2%
1926	76	38	114	13.5%
1927	64	37	101	13.0%
1928	78	21	99	12.1%
1929	73	39	112	12.2%
1930	81	39	120	12.6%
1931	88	37	125	15.3%
1932	88	46	134	15.7%
1933	100	40	140	17.7%
1934	104	44	148	19.4%
1935	114	30	144	18.1%
1936	106	41	147	18.0%

Thus the experience of 1936 was very close to the average of recent years. This average was considerably higher than any of the earlier records.

The causes for which medical help was required are set forth as follows :—

	Average 1921-1925.	Average 1926—1930	Average 1931—1935	1933.	1934	1935.	1936.
MOTHER :—							
Torn Perineum ...	16	21	36	40	35	47	44
Prolonged, Tedious or Difficult Labour ...	11	12	17	17	17	20	11
Faulty Presentations...	7	7	10	6	15	11	9
Impactions	4	4	2	—	3	2	2
Hæmorrhages ...	4	6	7	7	7	3	3
Puerperal Fever ...	2	4	3	6	3	5	4
Other Rise of Temperature	4	2	3	3	5	2	3
Adherent Placenta ...	3	3	3	4	1	4	8
Albuminuria	2	1	1	2	1	1	3
Phlebitis	1	2	2	1	3	2	1
Abortion	1	1	2	5	1	—	1
Contracted Pelvis ...	1	—	—	—	—	—	—
Eclampsia	1	1	—	1	—	—	1
Prolapse of Cord ...	1	1	—	1	—	—	—
Induction	—	—	1	—	—	—	—
Miscellaneous	6	9	12	7	13	17	16
TOTAL ...	64	74	99	100	104	114	106
CHILD :—							
Discharging Eyes ...	10	8	12	9	20	7	10
Debility, Feebleness, etc.	8	9	8	4	5	7	3
Prematurity	6	5	7	11	6	7	7
Malformations ...	2	4	3	5	2	2	2
Convulsions and Fits	2	1	—	—	1	—	—
Suffocation	1	—	—	—	—	—	—
Hæmorrhages (various)	—	2	2	2	4	1	4
Miscellaneous	3	6	7	9	6	6	15
TOTAL ...	32	35	39	40	44	30	41

There is evidence in this Table of increased care of the Perineum, a much-needed change in midwifery practice. This is one of the directions in which post-natal examinations would prove of value.

In other respects the Table repeats the average experience.

ASSISTED SCHEMES IN CONNECTION WITH MATERNITY WELFARE.

The four main sections in the scheme are : (a) Milk and Milk Foods to expectant and nursing mothers; (b) Provision of Maternity Home Accommodation at reduced fees; (c) Help towards the payment of the fees of Medical Practitioners called in by Midwives under the Midwives Act; (d) Provision of Dental Treatment and Dentures.

(a) Milk Supply.

The following Table shows the number of mothers and the quantity of milk supplied during 1936, together with the figures for previous years :—

Year.	Mothers.			Pints of Milk.		
	Expectant.	Nursing.	Total.	Expectant.	Nursing.	Total.
1930	39	104	143	1,823	10,989	12,812
1931	59	181	240	2,784	21,744	24,528
1932	101	272	373	4,991	26,971	31,962
1933	107	273	380	5,093	27,280	32,373
1934	80	198	278	3,616	20,659	24,275
1935	83	207	290	4,351	19,680	24,031
1936	83	233	316	4,326	28,133	32,459

(b) Maternity Home Fees.

244 women out of a total of 311 were admitted to the Ipswich Maternity Home at reduced fees. This represents 78% of assisted cases in 1936, as compared with 79% in 1935 and 79% in 1934.

The full fee is 9/- per day, but women were admitted at varying rates as under :—

8/- ...	7	4/- ...	41	2/- ...	12
7/- ...	22	3/6 ...	1	1/6 ...	3
6/- ...	59	3/- ...	9	1/- ...	4
5/- ...	65	2/6 ...	11	Free ...	4
4/6 ...	6				

The same procedure was followed as in previous years, and the charges fixed in accordance with an income scale.

(c) Doctors Fees.

The midwives found it necessary to call in medical assistance at 143 confinements for 147 causes. Accounts were received from Medical Practitioners in 130 of these cases.

The amount paid by the Local Authority was £158 15s. 7d., as compared with £163 5s. 0d. in 1935. In 89, or 68%, of these cases, the fee has been settled in full, the amount recovered being £97 18s. 7d

Twenty-nine, or 22%, desired to pay by instalments, and the sum received to date totals £15 9s. 6d.

In 16 cases the fee due has been written off on account of poverty.

To date, therefore, £113 8s. 1d., or 71%, of the cost under this heading, has been recovered. The amount recovered in 1935 was 75%.

(d) Dental Treatment.

DENTAL WORK IN CONNECTION WITH MATERNITY WELFARE.

Dental treatment is now carried out at the Branch Clinic as well as at the Main Clinic.

Mr. T. A. Edmondson, the Dental Surgeon, reports as follows :—

Ante- and Post-Natal.

I beg to report on the dental treatment of Maternity Cases for the year ending December 31st, 1936. There are two classes, viz., Ante-Natal and Post-Natal.

The work done is detailed as follows :—

	Main Clinic.			Branch Clinic.			Total.
	A.N.	P.N.	Total.	A.N.	P.N.	Total.	
Number of mouths examined ...	195	70	265	96	28	124	389
,, having one or more septic teeth	153	56	209	90	23	113	322
,, advised to have treatment	184	59	243	91	25	116	359
,, actually treated at Clinic	127	53	180	37	25	62	242
,, of attendances made ...	523	290	813	126	100	226	1,039
,, of teeth extracted ...	581	362	943	244	175	419	1,362
,, of Nitrous Oxide administrations ...	131	62	193	46	33	79	272
,, of Local anaesthetics given	15	13	28	3	2	5	33
,, of Amalgam fillings ...	103	27	130	32	18	50	180
,, of Amalgam & Cement fillings	54	13	67	12	4	16	83
,, of Cement fillings ...	19	9	28	8	7	15	43
Total number of fillings ...	176	49	225	52	29	81	306
Number of teeth filled	160	46	206	50	26	76	282
,, of sundry dressings, scalings, etc ...	1,140	277	1,417	248	135	383	1,800

The percentage of Ante-natal cases who consented to treatment was 40.66% at the Branch Clinic and 69.02% at Elm Street, whilst of the Post-natals 89.28% accepted treatment at the Branch compared with 89.83% at the Main Clinic. Eleven of the Post-natal cases were treated as Ante-natal cases in a previous year.

At the Branch Clinic, dentures were supplied in 13 cases, Ante-natal and Post-natal, while at Elm Street 39 dentures were supplied, 15 Ante-natal and 24 post-natal.

Mr. R. Cuthill, Assistant Dental Surgeon, reports in connection with the work at the Branch Clinic that 38 women were found to be

suffering from oral sepsis, and the average age of these women was 33.4 years. These women required to have all their remaining teeth extracted, and their ages ranged from 23 to 46 years.

Of the 59 Ante-natal cases who refused treatment, only one said she was prejudiced against dental treatment whilst pregnant, 28 took the line of least resistance by accepting appointments with no intention of attending for treatment, and of the remaining 30, it is my opinion that the majority refused because of the fear of having to undergo any discomfort during the treatment. In view of their condition this is most remarkable.

The high percentage (89.28) of consents in the Post-natal cases is accounted for by the fact that most of these women have presented themselves at the Dental Clinic with the object of having dental treatment and it has not been necessary to persuade them.

(Signed) T. A. EDMONDSON,
Dental Surgeon.

CHILD WELFARE.

The following is a Summary of the Home Visits since 1921 :—

HOME VISITS BY HEALTH VISITORS.

Year.	Expectant Mothers.	Children.		
		—1	1—5	Total.
Average				
1921—1925	14	2,090	1,910	4,000
1926—1930	35	1,596	3,012	4,608
1931—1935	82	3,396	6,168	9,564
1926	18	1,643	2,149	3,792
1927	6	1,477	2,094	3,571
1928	20	1,621	4,432	6,053
1929	55	1,590	3,384	4,974
1930	75	1,647	3,004	4,651
1931	61	2,965	5,992	8,957
1932	69	3,721	6,326	10,047
1933	65	3,403	6,182	9,585
1934	120	3,158	5,825	8,983
1935	96	3,735	6,516	10,251
1936	152	3,124	5,295	8,419

There was thus a considerable reduction in the number of home visits in 1936. This was due to two causes in the main, viz. :—

1. The time taken up in the home visiting of Measles cases.
2. The increase in the number of clinics at the centres with special reference to the new Branch Clinic.

In addition the Health Visitors paid visits under the following headings :—

To Midwives	20
.. Cases in which Midwives had summoned Medical assistance	64
.. Cases notified as suffering from Puerperal Fever, Ophthalmia Neonatorum, etc.	38
.. Stillbirths	56
.. Miscellaneous Visits	1,325

743 visits were paid by members of the staff to homes in connection with fees relating to Medical assistance and the Maternity Home.

WORK OF THE INFANT CLINICS.

There are two Infant Clinics in Ipswich now, one at the Public Health Department in Elm Street and the other at the Branch Clinic, Clapgate Lane. The latter was opened on April 16th, 1936, and superseded the Branch Clinic which was held at the Red Triangle Hut, Nacton Estate.

The new premises, with proper accommodation and modern equipment, has enabled clinics to be held under excellent conditions, beneficial both to the parents, patients and staff.

Infant clinics are held during the following sessions :—

Public Health Department, Elm Street.—Every week-day afternoon except Saturday from 2.30 p.m. to 5 p.m.

Branch Clinic, Clapgate Lane.—Tuesday, Wednesday and Thursday from 2.30 p.m. to 5 p.m. Monday and Friday from 4 p.m. to 5 p.m.

The following is a Summary of the visits paid to the centres since 1921 :—

Year.	MAIN CLINIC			BRANCH CLINIC.			TOTAL.		
	Infants—1.	Children 1—5.	Total	Infants—1.	Children 1—5	Total.	Infants—1.	Children 1—5.	Total
Average									
1921—1925	7,502	3,013	10,515	—	—	—	7,502	3,013	10,515
1926—1930	8,711	3,833	12,544	—	—	—	8,711	3,833	12,544
1931—1935	8,216	4,132	12,348	3,008	1,527	4,535	11,224	5,659	16,883
1926	7,428	3,083	10,511	—	—	—	7,428	3,083	10,511
1927	7 076	3,206	10,282	—	—	—	7,076	3,206	10,282
1928	9.144	4,079	13,223	—	—	—	9,144	4,079	13,223
1929	8,820	3,973	12,793	1,243	481	1,724	10,063	4,454	14,517
1930	7,930	3,749	11,679	1,916	596	2,512	9,846	4,345	14, 191
1931	9,024	4,608	13,632	2,660	1,263	3,923	11,684	5,871	17,555
1932	8,381	4,287	12,668	2,615	1,615	4,230	10,996	5,902	16,898
1933	8,056	3,930	11,986	3.175	1,657	4,832	11,231	5,587	16,818
1934	7,763	4,003	11,766	2,886	1,473	4,359	10,649	5,476	16,125
1935	7,856	3,831	11,687	3,704	1,628	5,332	11,560	5,459	17,019
1936	9,018	4,670	13,688	3.939	2,806	6,745	12,957	7,476	20,433

Thus, in spite of the new Branch Clinic, the number of visits paid by infants and toddlers to the old Clinic reached the highest figure in its history.

The Branch Clinic has proved most popular, the attendance of both infants and toddlers reaching record figures.

The increasing use of these clinics by the toddler group is a pronounced and gratifying feature of the returns and reflects the enthusiasm of Dr. Jolly and the conscientious work of the Health Visitors.

The total figure of 20,433 visits of infants and toddlers to our clinics in 1936 is an effectual answer to our adverse critics.

EXAMINATION OF INFANTS BY MEDICAL OFFICER

Under the Personal Supervision of the Assistant Medical Officer (Dr. Doris E. P. Jolly).

Public Health Department, Elm Street.—Monday and Wednesday afternoons from 2.30 p.m. to 5 p.m.

Branch Clinic, Clapgate Lane.—Tuesday and Thursday afternoons from 2.30 p.m. to 5 p.m.

Age	No. of Infants Examined.	No. of Re-Examinations	Total 1936.	1935.	Average 1926—1930.	Average 1931—1935
—1	989	2,843	3,832	3,075	1,645	3,201
—2	295	829	1,124	689	445	796
—3	235	360	595	489	217	483
—4	176	252	428	335	161	314
—5	131	182	313	223	117	219
Total	1,826	4,466	6,292	4,811	2,585	5,013

The number of examinations by the Medical Officer continues to increase, especially those over one year.

REPORT OF THE MEDICAL OFFICER IN CHARGE OF THE INFANT WELFARE CENTRE.

The attendances at the Child Welfare Centres in 1936 showed an increase at both clinics. It is encouraging, too, that a greater number of children between the ages of 1-5 years were brought up for advice. Increased opportunity for the medical supervision of this the pre-school group should eventually lower the defect rate of the five-year-old school entrant.

During the past twenty years or so maternal knowledge has obviously greatly increased in the matter of the realisation of the value to the child of fresh air, cleanliness, suitable clothing, etc., but speaking particu-

larly of the toddler group, much teaching is yet required to ensure that the need for adequate sleep and a well-balanced diet, both so essential to the proper nutrition of the child, is fully appreciated.

It is possible that improper diet may have some bearing on the sad fact that of the young children brought up to one of the dental clinics an average of four decayed teeth apiece was found by the age of 3½ years —that is probably within less than two years of the eruption of the teeth decay was already far advanced.

The ideal diet for everyone is difficult to formulate, but there seems little doubt that the majority of clinic children over twelve months take too little fresh milk, in some cases because the mother states that the child refuses it, and in others because the family exchequer does not allow sufficient fresh milk to be purchased—in some families, indeed, only cheap tinned milk appears to be used, the popularity of the latter with the child probably depends on its sweetness, and with the mother on its cheapness, coupled with her ignorance of its relatively lower food value, especially in the usual weak dilutions used

With the increased elasticity of the local milk scheme to include the toddler group where necessary, one hopes the consumption of this, probably the most valuable of all single foods to the growing child, will increase.

The children will not, however, obtain the maximum benefit unless the co-operation of the parents in the matter of training the children early to take this food can be obtained. A definite milk intolerance is extremely rare in childhood, and the distaste and refusal, which one so commonly hears mentioned, is generally the outcome of unwise parental suggestions; or of their failure to continue the habit of proper milk consumption by the child, as soon as mixed feeding has been established in infancy. If no gap were allowed to occur in the adequate use of milk between infancy and school age, it is probable that the good habit would become firmly fixed, and that a higher proportion of school children would continue to take advantage of the milk scheme, greatly to their benefit.

Even an elementary knowledge of diet and foodstuffs could be of great economic use to many mothers of families, and unfortunately they do not at present fully appreciate this and continue to spend large sums of money, which they can ill afford, on buying, for example, aperients for constant use, when with little or no added expenditure, but a little wiser planning, the diet of the different children would be so re-arranged that use was made of the natural laxative type of foodstuff where required. Once again parental suggestion is all important; the child must be trained to take the right food, and here example is better than precept.

Advice on desirable variations in diet is not always received with any enthusiasm at present, it is so much less trouble to apparently correct dietetic errors by resort to medicine, and it is indeed difficult to dislodge from many maternal minds the erroneous notion that successful child nurture necessarily implies regular and frequent dosage with drugs.

D. E. P. Jolly.

ARTIFICIAL LIGHT CLINIC.

Artificial Light Clinic—Monday, Tuesday, Thursday and Friday, 2.30 p.m., Elm Street.

The figures in the appended Table show the number of children who attended :—

Age.	No of Children Treated.	Number of Re-Visits	Total 1936.	1935.	Average 1931—1935
— 1	3	43	46	115	238
— 2	11	130	141	271	411
— 3	5	113	118	264	235
— 4	8	92	100	291	194
— 5	4	58	62	249	201
Total	31	436	467	1,190	1,279
School Children	104	1,555	1,659	1,164	2,014
Grand Total ...	135	1,991	2,126	2,354	3,093

The following Table shows the defects of the children referred to the Sunlight Clinic :—

Defect.	— 5 years.	+ 5 years.	Total.
Subnormal Nutrition ...	5	5	10
Pretubercular Debility ...	1	5	6
Enlarged Glands (Neck) ...	1	13	14
Rachitic & Prerachitic ...	5	—	5
Tuberculous Affections :—			
Cervical Glands ...	—	9	9
Abdominal ...	—	—	—
Bones & Joints ...	—	—	—
Lupus	—	1	1
Convalescence following Infectious Diseases ...	—		—
Catarrhal and Bronchial Infections	1	7	8
Anæmia, Debility and Marasmus	6	41	47
Unclassified	1	2	3
TOTAL ALL FORMS ...	20	83	103

OPHTHALMIA NEONATORUM.

Ten cases were notified in 1936, as compared with 15 in the previous year.

Three cases were treated at home by medical practitioners and one at the Infant Clinic.

Of the other cases two were admitted to the East Suffolk and Ipswich Hospital and four to the Ipswich Isolation Hospital.

The following Table gives the result of treatment :—

Recovery without impairment of vision ...	9
Marked impairment of both eyes	—
Died	1
Removed from District and lost sight of ...	—

INFANT LIFE PROTECTION.

At the beginning of 1936 there were 69 Foster-Mothers and 89 children on the Register, whilst at the end of the year there remained 61 Foster-Mothers and 77 children.

The Health Visitors paid 156 visits to children under five years of age, and 186 to children over five years.

During the year two children were removed from unsuitable homes, one because of insufficient accommodation and the other owing to alleged ill-treatment.

One applicant for recognition as a Foster-Mother was considered unsuitable, and her name was not entered in the Register.

One Foster-Mother was warned for non-compliance with the Regulations.

ASSISTANCE SCHEMES IN CONNECTION WITH CHILD WELFARE.

The main sections of the schemes are :—(a) Milk and Milk Foods for Infants; (b) Provision of Dental Treatment.

(a) Milk and Milk Foods.

The following Table shows the number of infants and the quantity of Milk or Milk Foods supplied during 1936, together with the figures for the six previous years :—

Year.	Infants.	Cows Milk. Pints.	Dried Milk. Lbs.	Dried Milk. Pints.	Total Pints of Milk.
1930	65	829	760	or 4,140	4,969
1931	88	635	989	or 5,687	6,322
1932	106	760	1,022	or 5,876	6,636
1933	98	963	1,198	or 6,888	7,851
1934	69	486	953	or 5,479	5,965
1935	76	1,061	766	or 4,404	5,465
1936	142	4,553	1,220	or 7,015	11,568

From this it appears that the number of infants supplied with milk and the quantity of milk supplied in 1936, were far above the average of recent years.

(b) Dental Treatment.

DENTAL WORK IN CONNECTION WITH INFANT WELFARE.

Dental treatment is now carried out at the Branch Clinic as well as the Main Clinic.

Mr. Edmondson reports as follows :—

	Main Clinic.			Branch Clinic.			Total.
	M	F	T	M	F	T	
Number of cases inspected at Clinic	163	149	312	44	49	93	405
Number of cases having septic conditions of the mouth ...	150	144	294	39	41	80	374
Actual number of cases treated at clinic	146	141	287	39	38	77	364
Number of attendances made ...	245	215	460	63	82	145	605
,, of temporary teeth extracted	286	242	528	71	59	130	658
,, of Local Anaesthetics given	16	20	36	2	2	4	40
,, of Nitrous Oxide and Oxygen administrations	149	143	292	37	35	72	364
,, of Fillings	55	45	100	21	21	42	142
,, of Sundry Dressings ...	61	25	86	1	2	3	89
,, to whom advice was given, no treatment being necessary ...	13	5	18	5	8	13	31

The ages of the children treated at the Main Clinic ranged from 1 to 5 years as follows : under 1, nil; under 2, 3; under 3, 14; under 4, 98, under 5, 172.

Mr. R. Cuthill, Assistant Dental Surgeon, reports in connection with the work at the Branch Clinic that 93 cases were inspected, the great majority of whom were referred by either Dr. Jolly or the Health Visitor. Very few mothers have taken the opportunity to bring their children to the clinic for inspection unless some dental trouble has exhibited itself.

The ages of the children inspected ranged from 1 to 5 years, as follows : 1 year, 1; 2 years, 7; 3 years, 32; 4 years, 52; 5 years, 1.

The average age of the children was 3½, and the average number of decayed teeth per child was 4.

(Signed) T. A. Edmondson,
Dental Surgeon.

IPSWICH ISOLATION HOSPITAL.

The appended Table shows the total numbers admitted to, and treated at, the Hospital since 1901 :—

Year.	Admissions.	Total Treated.
Annual Average 1901—1910	176	202
,, 1911—1920	574	634
,, 1921—1930	490	561
,, 1921—1925	423	484
,, 1926—1930	557	639
,, 1931—1935	857	984
1931	1,068	1,200
1932	783	944
1933	647	744
1934	955	1,072
1935	831	958
1936	684	817

The numbers dealt with in 1936 were thus below the average of recent years.

Patients were admitted to the Hospital from the under-mentioned Authorities :—

Authority.	Infectious Diseases.	Tuberculosis.	Total.
IPSWICH	**459**	**55**	**514**
County Councils—			
East Suffolk	17	5	22
Isle of Ely	—	2	2
Norfolk	—	2	2
West Suffolk	—	1	1
County Boroughs—			
Great Yarmouth	—	1	1
Urban District Councils—			
Aldeburgh	16	—	16
Felixstowe	13	—	13
Halesworth	1	—	1
Leiston	1	—	1
Saxmundham	3	—	3
Stowmarket	1	—	1
Woodbridge	3	—	3
Rural District Councils—			
Blyth	22	—	22
Cosford	21	—	21
Debeu	22	—	22
Gipping	3	—	3
Hartismere	25	—	25
Samford	6	—	6
Other Authorities—			
Royal Air Force, Martlesham	1	—	1
Private O.B Cases ...	4	—	4
TOTAL	618	66	684

ACCOMMODATION.

Table giving the number of admissions and Patient Days for Ipswich and Outside Borough Patients (Infectious Diseases only):—

Year	Admissions				Patient Days.				Average Weekly number under treatment.
	Ipswich.	"Outside" Patients.	Total.	% of Outside Patients.	Ipswich.	"Outside" Patients.	Total.	% of Outside days.	
1929	528	123	651	18.9	18,609	4,448	23,057	19.3	74
1930	535	124	659	18.8	19,002	4,931	23,933	20.6	77
1931	902	145	1047	13.8	36,308	5,617	41,925	13.4	135
1932	590	139	729	19.0	26,644	6,113	32,757	18.7	103
1933	430	153	583	26.2	17,026	6,184	23,210	26.6	73
1934	624	270	894	30.2	24,327	11,393	35,720	31.8	112
1935	623	146	769	19.0	24,620	5,682	30,302	18.7	98
1936	459	159	618	25.7	16,626	5,842	22,468	26.0	74

The high proportion of outside cases is an indication of the need for this accommodation.

The following Table gives the usual details as to admissions, etc. :—

Disease		Average 1921–1925	Average 1926–1930	Average 1931–1935	1935	1936
INFECTIOUS DISEASES	No. in Hospital Jan. 1st	41	47	100	99	106
	Admissions ...	357	475	804	769	618
	Total Treated ...	398	522	904	868	724
	No. discharged ...	349	444	774	746	656
	,, of deaths ...	16	21	27	16	29
	,, Remaining Dec. 31st	33	57	103	106	39
TUBERCULOSIS.	No. in Hospital Jan. 1st	18	21	20	16	20
	Admissions ...	66	57	43	59	56
	Total Treated ...	84	78	63	75	76
	No. Discharged ...	46	28	29	35	31
	,, of Deaths ...	18	28	16	20	23
	,, Remaining Dec. 31st	20	22	18	20	22
SURGICAL TUBERCULOSIS.	No in Hospital Jan. 1st	—	14	11	12	7
	Admissions ...	—	25	10	3	10
	Total Treated ...	—	39	21	15	17
	No. Discharged ...	—	21	10	6	12
	,, of Deaths ...	—	3	1	2	1
	,, Remaining Dec. 31st	—	15	10	7	4
TOTAL	No. in Hospital Jan. 1st	59	82	131	127	133
	Admissions ...	423	557	857	831	684
	Total Treated ...	482	639	988	958	817
	No Discharged ...	395	493	813	787	699
	,, of Deaths ...	34	52	44	38	53
	,, Remaining Dec. 31st	53	94	131	133	65

Table showing the principal Diseases admitted to the Isolation Hospital, together with the fatalities attached to each :—

Diseases	No. of Cases Admitted			Deaths			Case Fatality per cent.
	Ipswich	Other Districts	Total	Ipswich	Other Districts	Total	
Scarlet Fever ...	166	94	260	—	1	1	0.37
Diphtheria ...	107	16	123	6	1	7	5.69
Other Throat, etc Diseases—							
+ Contacts ...	10	—	10	—	—	—	—
Tonsillitis ...	13	2	15	1	—	1	6 66
Measles and Rubella	51	8	59	1	—	1	1.69
Erysipelas ...	23	12	35	4	—	4	11.43
Puerperal Fever and Pyrexia ...	17	12	29	2	2	4	13.79
Pneumonia ...	11	2	13	5	1	6	46.15
Pertussis	12	1	13	3	—	3	23.08
Ophthalmia Neonatorum ...	4	—	4	—	—	—	—
Typhoid Group ...	3	—	3	—	—	—	—
Chicken Pox ...	1	2	3	—	—	—	—
Pemphigus ...	1	1	2	—	1	1	50 00
Encephalitis Lethargica ..	1	1	2	—	1	1	50 00
Mumps	1	—	1	—	—	—	—
Miscellaneous Group	15	1	16	—	—	—	—
Nils, Queries, etc. ...	23	7	30	—	—	—	—
TOTAL ... (Infectious Group)	459	159	618	22	7	29	4 69
Tuberculosis—							
Pulmonary ...	45	11	56	17	6	23	41.07
Other Forms ...	10	—	10	1	—	1	10.00
GRAND TOTAL ...	514	170	684	40	13	53	7.75

SMALL-POX HOSPITAL.

This Hospital was not utilised for the treatment of Small-pox during 1936.

HEATHFIELDS MUNICIPAL HOSPITAL.

The following Table gives the statistics for 1936 :—

	Males.	Females.	Persons.	1935.
No. in Hospital on 1st January, 1936	150	120	270	260
Admissions during the year ...	441	357	798	722
Total treated	591	477	1,068	982
Discharges during the year ...	353	254	607	499
Deaths during the year	106	113	219	213
Remaining on 31st December, 1936	132	110	242	270

The duration of stay of the 826 persons who were either discharged from, or died in, the Institution, was as follows : —

(a) Four weeks or less 430
(b) Exceeding four weeks, but under 13 weeks 233
(c) Exceeding 13 weeks 163

The types of cases admitted are indicated briefly in the following rough classification of some of the principal diseases or groups of diseases dealt with :—

Types of Cases.	Nos. Admitted.			
	1933	1934	1935	1936
Dementia	53	45	60	52
Senile Dementia	4	4	14	22
Epilepsy	24	17	21	18
Other diseases of nervous system ...	75	62	66	83
Heart diseases	85	75	57	83
Senile decay	20	24	45	47
Diseases of skin	23	30	27	23
Bronchitis	38	52	63	65
Cancer	43	29	42	47
Tuberculosis	16	20	13	28
Maternity	19	20	29	14
Violence	26	19	31	23

The age distribution of the admissions was as follows :—

Age Periods	No. Admitted.			
	1933	1934	1935	1936
Under 1 year ...	51	48	47	43
1—25 years ...	92	78	90	108
25—45 ,, ...	169	134	134	143
45—65 ,, ...	183	159	198	232
65—85 ,, ...	210	226	224	233
Over 85 ,, ...	15	21	29	39
Total ...	720	666	722	798

AMBULANCE SERVICE.

The appended Table indicates the journeys and mileage run during 1936, as compared with the previous year, and the average of the five years 1931-1936.

SERVICE		Average 1931—1935 (inclusive).	1935	1936
AMBULANCE				
Ipswich ...	Journeys	575	533	349
	Miles ...	2441	2207	1540
Out of Borough ...	Journeys	135	114	138
	Miles ...	3648	3331	5167
Total ...	Journeys	710	647	487
	Miles ...	6089	5538	6707
BEDDING VANS.				
Collection of Bedding	Journeys	256	273	249
	Miles ...	1946	2391	2136
Return of Bedding	Journeys	96	77	96
	Miles ...	896	786	957
Collection of Meat	Journeys	70	18	18
	Miles ...	347	109	137
Port Work Pin Mill	Journeys	1	—	—
	Miles ...	24	—	—
Small Pox Hospital	Journeys	20	30	—
	Miles ...	103	150	—
Other Journeys	Journeys	125	145	304
	Miles ...	1200	1235	1921
Total ...	Journeys	568	543	667
	Miles ...	4516	4671	5151

The original Motor Ambulance and Bedding Vans were brought into use on January 1st, 1928, and at the beginning of 1936 it was evident that the old Ambulance was no longer suitable for the work being placed upon it. Accordingly the Committee decided to purchase a new vehicle,

and on the 18th May, 1936, a 20 h.p. Austin Ambulance was taken over. This up-to-date vehicle has proved extremely satisfactory and is a credit to the ambulance service.

Towards the end of the year the Committee were taking steps to replace the old Bedding Van (with its two interchangeable bodies) for two vans of modern design. The choice fell on 30-cwt. Bedford vans, and two vehicles (with special linings and certain additions) were delivered to the Hospital on 25th March, 1937.

If the Table at the commencement of this section is examined, it will be found that although the ambulance has not run quite so many miles in Ipswich, an increased amount of work has been done for the County area, bringing the total ambulance mileage above the average.

Journeys performed for outside authorities are charged at the rate of 1/- per mile.

The old Bedding Van was also used to a greater extent in 1936 than in the previous year.

LABORATORIES.

The work carried out in the Laboratory of this Department since 1921 is as follows :—

Year.	SWABS from Cases of Diphtheria or Suspected Diphtheria.			SPUTA from Actual or Suspected Cases of Tuberculosis.		
	Examined.	Positive.	Per cent. Positive.	Examined	Positive.	Per cent. Positive.
Average						
1921-25	1,260	240	19%	218	52	24%
1926-30	1,560	239	15%	236	68	29%
1931-35	4,231	481	11%	270	74	27%
1931	5,023	793	16%	232	52	22%
1932	4,847	679	14%	234	62	26%
1933	3,171	285	9%	312	85	27%
1934	3,640	274	7%	289	80	27%
1935	4,474	375	8%	283	89	31%
1936	4,116	375	9%	400	128	32%

2,121 Urines were examined in connection with the Ante-Natal Clinic, with the following results :—

Albumen, trace	136
Albumen, cloud	13
Sugar	22
Pus	5

Examinations carried out at other Laboratories on behalf of the Local Authority during 1936 were as follows :—

Widals (Typhoid and Para. A and B) ...	7
Urines	5
Faeces	6
Virulent Test K.L.B.	33
Sputum	1
Bath Water Analyses	105
Other Water Analyses	6
Swabs, K.L.B.	2
Cerebro-spinal Fluid	6
Milk, Annual Inoculations, T.B.	12
Milk, Bacterial Counts	74
Miscellaneous for Sanitary Inspector ...	1
Pleural Fluid	1

These figures do not include work carried out by the Public Analyst, particulars of which are given in the Chief Sanitary Inspector's Report.

In addition, under the V.D. Scheme, the following specimens were examined at the East Suffolk County Council Laboratory :—

Nature of Test.	Number of Tests in respect of Patients under Care of—		
	Treatment Centre	Hospitals and other Institutions	Private Practitioners
MICROSCOPICAL— For detection of Gonococci			9
SERUM TESTS— For Wasserman reaction ...	42	9	41
CEREBRO SPINAL FLUID TESTS Wasserman reaction ...	-	3	1
CULTURES	47	-	—
TOTAL	89	12	51

The cost of this service was £59 3s. 9d.

HEALTH EDUCATION.

The usual distribution of "Better Health" booklets took place each month throughout the year.

The Committee has six Empire Marketing Board Poster Frames in various positions in the town and on these are displayed a different set of posters each month. These posters are purchased from the Central Council for Health Education.

A successful Health Week was held during 1936; the week chosen was that commencing on the 16th November, and it will be noted that this is about a month later than usual.

The programme was arranged on the usual lines and the chief features were :—

1. THE HEALTH EXHIBITION in the Public Hall was open every day from 10 a.m. to 10 p.m., and the official opening was performed by Capt. G. S. Elliston, M.C., M.A., J.P., M.P.

Stands were occupied by the following Associations, Councils and Societies :—

National Council for Maternity and Child Welfare.
The Ipswich Public Health Department.
The Ipswich Centre, St. John Ambulance.
The Health and Cleanliness Council.
The Institute of Hygiene.
The Cremation Society.
The Ipswich Corporation Electric Supply Department.
The Eugenics Society.
The National Milk Publicity Council.
National Ophthalmic Treatment Board.
British Social Hygiene Council.
Dental Board of the United Kingdom.
National Association for the Prevention of Tuberculosis.
Ipswich Gas Light Company.

The Exhibition was very successful and attracted many interested visitors in addition to the organised parties of school children who attended the morning sessions.

2. PROGRAMME OF LECTURES.

Seven main lectures were held during the week and the subjects chosen were as under :—

"Thirty Years of Public Health Work in Ipswich" (Dr. A. M. N. Pringle).

"Saving the Children from Diphtheria" (Dr. G. W. J. Bousfield).

Lecture Demonstration on the work of the Women's League of Health and Beauty.

"The Price of Ignorance (Dr. R. Forgan).
"Tuberculosis" (Dr. P. W. Edwards).
"Heredity" (Miss Hilda Pocock).
"Brains that do not grow up" (Dr. F. D. Turner).

All the lectures attracted good audiences, but the disadvantage of having to hold them in the Public Hall is that the Exhibition cannot be open at the same time.

3. FILM DISPLAYS.

Suitable films were shown to the children in the mornings and at most of the meetings.

4. COMPETITIONS were arranged for grown-ups and children and attracted many entries.

Ipswich Health Weeks are arranged entirely by the Staff of the Public Health Department, which means a terrific amount of extra work, and for this reason it is impossible to hold a "Week" every year. I think once in three years is about the best arrangement.

VACCINATION.

There was no change during 1936 in the Vaccination Scheme.

The figures in the following Table are supplied by the Vaccination Officers :—

	Ipswich Eastern.		Ipswich Western		Ipswich.	
	Nos.	Per cent	Nos.	Per cent.	Nos.	Per cent.
No. of Children Registered during 1936	976	—	533	—	1509	—
Cases Vaccinated	147	15.1	88	16.5	235	15.6
No. of objections to Vaccination	773	79.2	401	75.3	1174	77.7
No. of Infants insusceptible ...	3		—		3	
No. of Infants who died unvaccinated	26	5.7	33	8.2	59	6.7
No. of Children who left the district	25		7		32	
Postponed or cases in the hands of the Public Vaccinator ...	2		4		6	

The percentage of children vaccinated during the last five years is given below :—

1932	...	18.9%
1933	...	17.4%
1934	...	20.3%
1935	...	19.5%
1936	...	15.6%

VENEREAL DISEASES.

REPORT RELATING TO ALL PERSONS WHO WERE TREATED AT THE TREATMENT CENTRE AT IPSWICH DURING THE YEAR ENDING DECEMBER 31ST, 1936.

By Dr. F. Fowler Ward

(Medical Officer in Charge, Venereal Diseases Clinic).

The number of cases treated in 1936 were :—	Males.	Females.	Persons.
Gonorrhœa	96	31	127
Syphilis	89	64	153
Soft Chancre	—	—	—
Other conditions	53	32	85
Total 1936	**238**	**127**	**365**
Total 1935	256	131	387
Average 1931—1935 ...	236	128	364

The number of persons treated in 1936 is more or less the same as for other years.

The number of cases dealt with *for the first time* are given below classified according to residence :—

Year.	Ipswich.	East Suffolk.	West Suffolk.	Essex.	Total.
Average 1931—1935	126	64	2	12	204
1932	128	64	1	13	206
1933	113	67	4	10	194
1934	127	57	3	7	194
1935	134	67	2	12	215
1936	112	46	9	8	175

Ipswich, as the central town, provides the majority of fresh cases : the number of which is rather less than in previous years.

OUT-PATIENT ATTENDANCES.

(a) For individual attention by Medical Officer.

	Males.	Females.	Persons.
Gonorrhœa	842	152	994
Syphilis	488	282	770
Soft Chancre	—	—	—
Other conditions	67	88	155
Total 1936	**1,397**	**522**	**1,919**
Total 1935	1,579	801	2,380
Average 1931—1935 ...	1,613	850	2,463

Out-patient attendances are thus diminishing.

(b) For intermediate treatment (irrigation, dressing, etc.).

	Males.	Females.	Persons.
Gonorrhœa	3,173	420	3,593
Total 1935 ...	4,973	505	5,478
Average 1931—1935 ...	3,833	649	4,482

Again the number of attendances has decreased.

(c) Total.

	Males.	Females.	Persons
Gonorrhœa	4 015	572	4,587
Syphilis	488	282	770
Soft Chancre	—	—	—
Other conditions ...	67	88	155
Total 1936 ...	**4,570**	**942**	5,512
Total 1935 ...	6,552	1,306	7,858
Average 1931 1935 ...	5,446	1,498	6,944

There seems to be a definite decrease in the incidence of Venereal Diseases, and cases of acute Primary and Secondary Syphilis are comparatively rare.

Total number of attendances of all patients residing in each area :—

Year.	Ipswich.	East Suffolk.	West Suffolk.	Essex.	Total.
Average 1931—1935	5,731	1,032	44	137	6,944
1932	5,042	992	25	116	5,786
1933	4,653	926	61	113	7,599
1934	6,499	1,041	49	127	7,148
1935	6,532	1,147	46	133	7,858
1936	4,365	997	26	124	5,512

IN-PATIENT DAYS.

Number of Patients and aggregate number of " In-patient days " of treatment :—

	Males.		Females.		Persons.	
	Patients	Days.	Patients	Days.	Patients.	Days.
Syphilis	2	21	1	4	3	25
Gonorrhœa ...	10	182	2	64	12	246
Soft Chancre ...	—	—	—	—	—	—
Other conditions ...	1	6	1	6	2	12
Total 1936 ...	**13**	**209**	**4**	**74**	**17**	**283**
Total 1935 ...	12	166	9	230	21	396
Average 1931—1935 ...	8	116	9	273	17	389

Acute cases of Gonorrhœa, with complications, are best treated as In-patients—particularly females.

The following Table shows the " In-patient days " classified according to areas :—

Year.	Ipswich.	East Suffolk.	West Suffolk.	Essex.	Total.
Average 1931 –1935	167	162	36	24	389
1932	242	222	21	18	503
1933	87	194	—	16	297
1934	202	169	93	31	495
1935	155	162	64	15	396
1936	105	123	55	—	283

This more particularly applies to " County " cases.

EXAMINATION OF PATHOLOGICAL MATERIAL AND NUMBER OF DOSES OF ARSENOBENZENE COMPOUNDS GIVEN.

Year	Specimens Examined by Medical Officer at Centre.		Specimens Examined by an Approved Laboratory.		No. of doses of Arsenobenzene Compounds.				
	Spirochaetes	Gonococci	Wassermanns	Gonococci	Ipswich	East Suffolk	West Suffolk	Essex	Total
Average 1931—1935	5	186	121	97	223	117	11	40	391
1932	3	187	144	78	253	147	8	54	462
1933	8	193	120	101	241	83	25	59	408
1934	4	155	117	73	267	144	15	16	442
1935	3	187	60	104	158	50	3	3	214
1936	2	199	67	67	113	47	20	12	192

The decrease in the number of doses of Arsenobenzene Compounds is due to smaller number of acute cases as compared with previous years.

WATER SUPPLY.

The following is the return of the approximate amounts of water supplied from the various sources during 1936 :—

	Gallons.
Total Water from Wells in Waterworks Street ...	315,403,000
Total Water from Wells at Whitton	655,353,000
Total Supply, all sources	970,756,000

	Gallons.
Supply, per head, per day, in Borough, including Trades ...	27.42
.. .. 1935 ...	... 28.2
.. .. 1934 ...	... 27.38
.. .. 1933 ...	... 28.3
.. .. 1932 ...	... 26.0
.. .. 1931 ...	... 25.5

I am indebted to Mr. E. McLaughlin, the Borough and Water Engineer, for the figures.

The water is analysed at frequent intervals. No question has ever risen with regard to the purity of the Waters.

THE PURIFICATION OF THE WATER OF SWIMMING BATHS.

The examination of the water of our Swimming Baths, from the point of view of Bacterial contamination, was continued throughout the season of 1936, but along different lines from previous years.

Our previous enquiries had shown that, so far as Ipswich bath waters were concerned, there were certain forms of Bacterial life which could be regarded as being normally present in the water. These included B. Subtilis, a gram negative coccus and certain varieties of moulds.

None of these are known to be associated with disease in the human being, and they are not in themselves evidence of human pollution.

B. Subtilis is a highly resistant organism, universally distributed, and the gram negative coccus possibly even more so, so that it is not surprising to find that these organisms can resist the amount of chlorine present in bath water for as long as 4 or 5 hours.

B. Subtilis gains entrance to the bath water from the air, the surroundings of the bath, the bodies of swimmers and their bathing suits, and, as it is omnipresent, it is quite impossible to exclude it from the water. The same can be said of the gram negative coccus and moulds.

The organisms found in our bath water indicating the presence of pollution of human origin were B. Coli and staphylococci. So far, in spite of many examinations, streptococci have not been demonstrated. I confess this is surprising in view of the number of swimmers and the prevalence of streptococcal infections of the nose and throat. Nevertheless the fact remains.

The staphylococci found were chiefly Staph. Albus, and only very occasionally Staph. Aureus. These germs come usually from the skins of the swimmers.

The probabilities of pollution of human origin depend on many circumstances, such as the personal cleanliness of the swimmers, their age, sex and state of health. The type of bathing costume is of importance.

The enquiries conducted during 1936 were directed to the endeavour to discover the maximum load of swimmers which a properly treated bath water could carry without showing evidence of pollution.

The index of pollution adopted was the presence of B. Coli.

Various examinations were carried out at the St. Matthew's Baths in May and June which lead nowhere, because the method was found wrong.

From July onwards a new method was introduced, the essential factor in which was the examination of samples taken from the bath at definite intervals of time after the first, and the results compared with the number of bathers, the pH value and the proportion of chlorine.

In all cases the speed of circulation was the same, viz, 3 hours.

These examinations took place under two sets of conditions :—

1. A series of five beginning with the first sample in the early morning before any bathers had entered the bath, followed by three other samples at intervals of ¾ hour each. All the samples were plated out immediately they were taken from the bath. The plates were subsequently incubated at the Laboratory.

In each case the first sample was found to contain no B. Coli or other organisms indicating human pollution. The organisms found were few in number and consisted of B. Subtilis, moulds and a gram negative coccus. As the filtration apparatus had been closed down the whole of the night, highly resistant air-borne organisms of this kind would be expected to be found in the water especially with a diminishing proportion of chlorine.

The subsequent samples proved the point that, with a number of bathers actually in the bath and a much greater number since its opening, the probability of finding evidence of pollution of human origin became greater and greater.

The chief factors in this series were ultimately shown to be the number of bathers actually in the bath, and the chlorine content.

2. The second series also consisted of five separate examinations on days when there were special occasions at the bath, such as the Police Gala, the Electric Supply and Tramways Festival, and a special day for School Children.

All these festivals were held in the evenings so that the baths had to carry the load of the whole of the bathers of the day prior to the commencement of the festival.

In illustration in one instance there were six persons in the bath at the time of the experiment, but there had been 225 persons in the bath in the earlier part of the day.

In broad general terms this series yielded the same results as the first.

B. Coli were found in a sufficient number of instances to show that their presence could be expected in conditions of violent exertion and crowding.

Our previous work had shown that under proper conditions of treatment of the water B. Coli certainly did not survive very long. It thus became important to determine the length of time B. Coli introduced into the water under normal conditions of bathing would survive.

In consequence, a third series of experiments was carried out with bath water containing definite proportions of chlorine, and with definite pH. values, inoculated with cultures of various pathogenic organisms, including the B. Coli group.

The methods adopted in carrying out these experiments were as follows :—

BACTERIOLOGICAL EXAMINATION OF BATH WATERS, 1936.

Time Exposures.

After numerous preliminary experiments, the following method of ascertaining the times of survival of a specific organism, in chlorinated bath water, was adopted.

A sample was taken, as far as possible, under aseptic conditions from the inlet of the bath. This sample was transported, with as little delay as possible, to the laboratory in a tightly-corked sterile bottle. On arrival at the laboratory, the reaction of the water was noted and the chlorine estimated. A suspension of the organism under investigation was added in the proportion of 8 ml. to the litre. The sample was shaken and then divided as quickly as possible into 10 sterile 100 ml. stoppered bottles. In order to avoid delay in plating the "zero" plates, it was necessary for an assistant to perform this division. From the first bottle two plates of 1 ml. and 0.10 ml. respectively were poured. Two more plates were poured after a period of 1 minute had elapsed, and so on, until the end of 5 minutes. For the "six-minute" plates, the second bottle was started, and 5 pairs of plates were poured from this bottle at 1-minute intervals until the "10-minute" plates were reached. After a period of 5 minutes from the last plates, two plates were poured from the third bottle. This was repeated on the remaining bottles in turn at 5-minute intervals.

It was necessary to plate the samples in this manner, as the chlorine content rapidly decreased if a bottle was unstoppered frequently. There was also the question of air-borne organisms contaminating the sample.

The plates were incubated for 48-72 hours and the colonies thereon counted. If the number of organisms on the 1 ml. plate was too great to count with accuracy, the 0.10 ml. plate was used. It was found, also, that the averages of the counts of the 1 ml. and 0.10 ml. plates gave surprisingly accurate and uniform results.

From the above description it will be seen that the accuracy of this test depends, to a large extent, on the homogeneity of the suspension of the organism under investigation. The method of preparing this was as follows :—

A platinum loop measuring 1.5 mm. inside diameter was used throughout. A loopful of the organism was taken from a slope culture, obtained from the National Collection of Type Cultures, and added to approximately 120 ml. of sterile normal saline solution in a sterile bottle containing a few glass beads. The bottle and contents were then agitated in a shaking machine for 30 minutes. It was found preferable to use the suspension within 5 minutes of shaking in order to avoid the risk of the organisms "clumping."

Ordinary nutrient Agar was used as the culture media except in the case of the Streptococcus Hæmolyticus, when serum Agar was used.

A certain amount of contamination from organisms already present in the bath water is, of course, unavoidable. In practice it will be found that, in most cases, the contaminating colonies are readily distinguishable from the colonies of the organism which has been added to the water. These, obviously, should be allowed for in the final calculation.

It cannot be emphasised too strongly that the figures obtained from this investigation only apply to the particular strains of the organisms used in the experiment. Different strains gave widely varying results. For example, a pure culture of Straphylococcus Albus was obtained from pus. On exposure to bath water with a chlorine content of 0.50 parts per million, it was killed in 10 minutes. Another strain survived for 65 minutes. An organism that has been repeatedly sub-cultured on laboratory media is very much more resistant to the action of chlorine than an organism isolated as a pure culture in the first instance and used immediately.

It seems probable, therefore, that organisms excreted from the body into the bath would survive for a very much shorter period than those which have been cultivated in the laboratory.

In support of this view, which is of high importance, the following extract is given from the treatise on the examination of water supplies by Thresh, Beale and Suckling, published in 1933.

> "Numerous experiments have been recorded concerning the period of survival of B. typhosus in sewage, soil and water, but for the reasons already stated, and also the fact that different strains and usually artificially cultivated suspensions of typhoid bacilli have been used, results of a most conflicting nature have been obtained.
>
> "All the experiments that we have made have shown that 99 per cent. of the typhoid bacilli (cultivated) added to natural waters perished in five days.
>
> "Observations made on the survival of 'natural' or 'uncultivated' typhoid bacilli, that is, bacilli as voided in excreta, by the enteric patient or carrier, are of greater value. Here again the influence of various factors, as sunshine and temperature, must be considered.
>
> "The influence of temperature has been demonstrated, and the experiments of Houston (1913) also show how great is the difference between the survival times of uncultivated typhoid bacilli compared with their artificially cultivated descendants.
>
> "Raw River Thames water was used, and the number of typhoid bacilli added in numerous experiments varied from 40 per c.c. to 8,000,000 per c.c. Bottles of this infected water were kept in the laboratory, and it was found that with 'cultivated' bacilli a period

of five to nine weeks storage was required to effect practical destruction of the bacilli (failure to isolate from 100 c.c. of water). In the case of 'uncultivated' typhoid bacilli, however (the infected urine of a 'carrier' was used), the same result was attained, under the same conditions, in under half this period of time.

"It is believed, therefore, that typhoid bacilli gaining access to water direct from infected sewage generally perish in shorter time than experiments with laboratory cultivated strains would indicate."

The following Table classifies the results of these experiments :—

See Table facing this page.

This Table is a very valuable contribution to the whole subject of the sterilisation of bath water.

The waters in each case were taken from the Fore Street Bath and tested against cultures of the various germs enumerated in the Table.

There are certain broad general conclusions that can be drawn from the series.

1. Chlorine is an efficient sterilising agent of swimming bath water, if the proportion is kept at about .75 parts per million. Higher proportions are naturally more efficient but they have the disadvantage of being liable to produce some of the irritating effects of chlorine. In our experience .75 parts of chlorine is insufficient to produce appreciable irritation.

Lower proportions of chlorine sterilised the water in every instance but the process took too long.

The most resistant organism was the staphylococcus, which required up to half an hour, even in the highest concentrations of chlorine.

The streptococci required 10 minutes exposure to .75 part per million.

B. Coli also required 10 minutes, which accounts for the fact the bath waters examined in the ordinary way never show B. Coli if their chlorination is even moderately efficient.

The Para Typhoid B. group were less resistant than B. Coli 7 minutes being sufficient with .75 chlorine.

B. Typhosus showed definitely less resistance than Para Typhoid B., 5 minutes of .75 chlorine being sufficient.

All these experiments were carried out with strains of organisms which had been repeatedly sub-cultured, and we have shown that there

COUNTY BOROUGH OF IPSWICH. PUBLIC BATHS DEPARTMENT.

BACTERIOLOGICAL EXAMINATION OF BATH WATERS, 1936 — TIME EXPOSURES.

ORGANISM.	Chlorine	pH.	Zero.	1 m.	2 m.	3 m.	4 m.	5 m.	6 m.	7 m.	8 m.	9 m.	10m	15m	20m	25m	30m	35m	40m	45m	50m
Streptococcus Scarlatinae Type 1.	0.10	7.8	800	800	800	**900**	700	550	400	200	120	80	60	10	4	S	S	S	S	S	S
	0.25	8.2	1,400	1,400	1,200	1,000	900	**1,500**	900	500	200	180	90	10	2	2	S	S	S	S	S
	0.50	8.4	51,200	**52,000**	45,600	30,000	8,000	2,500	1,200	900	120	60	10	2	S	S	S	S	S	S	S
	0.75	8.0	6,200	5,000	3,500	2,000	800	600	500	250	80	20	4	S	S	S	S	S	S	S	S
	1.00	8.3	400	380	**250**	300	300	80	10	S	S	S	S	S	S	S	S	S	S	S	S
	2.00	8.2	1,600	1,000	800	120	40	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Streptococcus Faecalis.	0.10	8.4+	2,800	2,400	**3,000**	2,000	1,200	1,000	800	280	160	140	80	**15**	40	18	4	S	S	S	S
	0.25	7.8	6,000	5,000	3,000	2,000	1,600	1,000	**7,000**	250	100	80	20	5	S	S	S	S	S	S	S
	0.50	8.2	1,500	1,500	1,000	800	700	650	500	320	200	100	20	S	S	S	S	S	S	S	S
	0.75	8.2	3,000	2,800	2,600	2,400	1,200	1,000	850	600	280	100	20	S	S	S	S	S	S	S	S
	1.00	8.1	2,100	2,000	Contaminated	1,800	800	400	100	30	S	S	S	S	S	S	S	S	S	S	S
	2.00	8.4+	5,200	4,000	2,200	**Sterile**	1,000	350	60	S	S	S	S	S	S	S	S	S	S	S	S
Staphylococcus Albus 86 Albus.	0.10	8.1	21,000	21,000	18,000	14,000	10,000	7,500	6,000	Contaminated	4,200	4,000	3,800	1,000	600	400	200	80	10	S	S
	0.25	8.2	6,000	6,000	**200**	5,000	3,800	**6,800**	2,000	2,000	1,500	1,100	900	400	150	35	5	S	S	S	S
	0.50	8.0	1,800	1,700	**1,800**	1,500	1,200	1,000	**200**	500	400	300	280	150	40	12	S	S	S	S	S
	0.75	8.2	800	800	600	**900**	600	600	480	420	380	220	160	60	10	S	S	S	S	S	S
	1.00	8.4+	2,700	2,500	2,000	1,600	1,100	850	740	620	400	380	240	100	30	4	S	S	S	S	S
	2.00	8.4+	5,200	5,000	4,600	4,000	4,000	**4,200**	3,400	2,800	2,000	1,500	1,000	300	100	40	10	S	S	S	S
B. Coli Communis Escherich.	0.10	7.7	800	800	800	600	450	400	280	190	160	120	90	30	10	5	S	S	S	S	S
	0.25	8.0	2,800	2,800	2,400	2,000	1,500	1,200	800	600	420	280	200	50	2	S	S	S	S	S	S
	0.50	7.8	8,000	8,000	6,000	3,900	2,200	1,100	600	220	140	60	20	S	S	S	S	S	S	S	S
	0.75	8.4	3,400	3,000	2,000	1,500	920	800	400	180	80	20	5	S	S	S	S	S	S	S	S
	1.00	8.4+	2,700	2,000	1,200	800	500	300	110	60	30	8	S	S	S	S	S	S	S	S	S
	2.00	8.4+	1,700	800	220	180	12	2	S	S	S	S	S	S	S	S	S	S	S	S	S
Salmonella Paratyph: B.	0.10	8.4	700	700	600	500	400	310	300	220	180	80	20	S	S	S	S	S	S	S	S
	0.25	7.8	800	800	600	480	380	300	250	180	100	20	6	S	S	S	S	S	S	S	S
	0.50	9.2	4,000	4,000	3,000	2,000	800	350	80	10	S	S	S	S	S	S	S	S	S	S	S
	0.75	8.1	2,000	2,000	1,500	800	600	100	15	4	S	S	S	S	S	S	S	S	S	S	S
	1.00	8.1	120	80	40	20	14	6	S	S	S	S	S	S	S	S	S	S	S	S	S
	2.00	8.4+	1,200	700	200	50	2	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Salmonella Typh:	0.10	7.9	120	**130**	120	100	100	Contaminated	80	60	60	45	30	8	4	S	S	S	S	S	S
	0.25	7.8	340	340	340	**200**	300	220	200	150	90	60	35	S	S	S	S	S	S	S	S
	0.50	8.4	180	120	60	30	20	20	10	S	S	S	S	S	S	S	S	S	S	S	S
	0.75	8.0	1,100	800	500	300	150	65	S	S	S	S	S	S	S	S	S	S	S	S	S
	1.00	8.0	500	450	300	80	20	S	S	S	S	S	S	S	S	S	S	S	S	S	S
	2.00	8.4+	950	800	50	4	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S

East Suffolk County Laboratory, Ipswich.
9th February, 1937.

is good reason for the claim that such sub-cultured strains are more resistant to destructive influences such as chlorine than organisms introduced into the water under natural circumstances. This in my view justifies the claim that the times required to destroy uncultured germs introduced into chlorinated bath waters is less than the times shown in these experiments.

I consider under these circumstances that it is justifiable to claim that it has been proved that a concentration of .75 parts of chlorine per million of bath water is sufficient to secure efficient sterilisation in less than five minutes after contamination.

We have shown already that the probability of contamination with germs of human origin increases with the number of swimmers and possibly with their activity.

The Table we are considering shows that these contaminations are disposed of, except in the case of Staphylococci, in about half an hour even with the lowest degree of concentration of chlorine.

In my opinion the combination of these two facts and the information already summarised indicates that, by watching the chlorine content of the water so as to keep it in the vicinty of .75 parts of chlorine per million, we can be reasonably certain that we have reduced the risks of infection to the irreducible minimum.

It is quite impossible for any process to be devised which will secure instant sterilisation throughout a bath. Claims of this kind no doubt are made, but our experiments and the use of a little common sense will show that such claims will not stand examination.

There are disinfectants which are practically immediate in their action, but there would be no swimmers in baths filled with such fluids.

Finally, these experiments in my opinion enable a definite standard of chlorine content to be formulated and indicate the vital necessity of highly skilled supervision of the whole of the arrangements for the filtration of the bath water, its chlorination, aeration and alkalinisation.

No less important is the frequency of the turnover. Our baths are equipped so that a turnover every three hours can be obtained when the number of bathers indicates that such a speed of filtration is called for.

The efficiency of the latest types of chlorinators is such that the amount supplied to the bath water can be varied at will, and thus an increased call necessitated by an increased number of bathers can be met with speed and exactitude.

I record my thanks to Dr. Cade and his able assistant, Mr. Kane, for a piece of work characterised by intimate knowledge of the problem under investigation and the methods whereby an accurate estimation of the value of the methods of the purification of bath waters can be arrived at.

STREET CLEANSING AND COLLECTION AND DISPOSAL OF HOUSE REFUSE.

CLEANSING SUPERINTENDENT'S REPORT.

Table indicating the cost of Public Cleansing in Ipswich since 1927-28, together with the average cost for 110 Cities and Boroughs, 1934-35.

YEAR.	Number of Houses.	Population.	Average weight per 1,000 population.	Net Expenditure per ton per annum.				Net Expenditure per 1,000 population per annum.				Net Expenditure per 1,000 houses per annum.				Street Cleansing.					
				Collection.		Disposal.		Total.		Collection.	Disposal.	Total.		Collection.	Disposal.	Total.		Rate in the £.		Cost per 1,000 population.		Cost per 100 yds. of streets cleansed.		Cost per 1,000 gullies emptied.
			cwts.	s.	d.	s.	d.	s.	d.	£	£	£	£	£	£	£	£	d.		£	s.	s.	d.	£	
1927-28	21688	84140	7.7	12	2	10	3	22	5	86	72	158		360	305	665		7.49		83	8	—	—	—	
1928-29	22404	85990	7.7	11	5	10	3	21	8	81	72	153		334	300	634		7.22		94	6	—	—	—	
1929-30	22986	85800	8.5	12	0	6	10	18	10	91	52	143		339	193	532		6.72		90	5	22	7	—	
1930-31	23280	86860	8.4	11	11	7	10	19	9	92	60	152		344	225	569		7.04		89	7	21	3	—	
1931-32	23413	87770	8.3	12	2	8	3	20	5	93	66	159		349	247	596		7.30		89	7	21	9	—	
1932-33	24115	88700	8.5	11	11	7	6	19	5	92	58	150		338	214	552		6.70		86	16	21	2	47.2	
1933-34	24870	89070	8.5	11	8	7	5	19	1	91	57	148		326	206	532		6 60		90	8	21	1	47.1	
1934-35	25678	90157	8.9	11	3	7	9	19	0	92	64	156		325	224	549		6.60		97	15	22	7	34.5	
1935-36	27856	91400	9.2	12	2	5	9	17	11	104	49	153		339	161	500		6.60		101	0	8	3	25.0	
Average for 110 cities and boroughs (1934-1935)	—	—	16.9	9	7	5	1	14	8	137	71	208		612	316	928		—		151	0	—		—	

I submit herewith my report, together with a comparative Table of the Public Cleansing costs for the Borough of Ipswich for the year ended March 31st, 1936.

15,503 tons of house and trade refuse were collected and disposed of during the year.

By Incineration	... ...	5,893
.. Controlled Tipping	...	9,610
		15,503

The nett cost of the combined service was £13,930.

The population during the year has increased by 1,243 to 91,400, and the number of premises by 2,178 to 27,856.

Controlled tipping was further extended during the year and 62% of the total output was dealt with in this manner. The remainder was treated at the Destructor Works.

The cost of Street Cleansing during the year was £9,223, and Gully Cleansing £854. Snow Removal during this period cost £147. Since the issue of the last report Street Scavenging has been completely reorganised and 104 miles of adopted roads within the Borough are now receiving continuous attention, either daily or on alternate days according to the order of importance.

SUMMARY OF THE COST OF SERVICES UNDERTAKEN BY THE PUBLIC CLEANSING DEPARTMENT, 1935-1936.

Cleansing Costs	Total Gross Expenditure.	Revenue	Net Cost	Net Cost per head of population.
Collection of House and Trade Refuse ...	£9,594 0 0	£112 0 0	£9,482 0 0	2s. 0.8d.
Disposal of House and Trade Refuse ...	£5,157 0 0	£709 0 0	£4,448 0 0	11.6d.
Street Cleansing including Gully Cleansing and Snow Removal	£10,231 0 0		£10,231 0 0	2s. 2.9d.
Total	£24,982 0 0	£821 0 0	£24,161 0 0	5s. 3.3d.

L. A. JONES,
Cleansing Superintendent.

CHIEF SANITARY INSPECTOR'S ANNUAL REPORT, 1936.

Mr. H. L. Baty, Chief Sanitary Inspector, reports as follows:—

Analysis of Inspections.	1936
Private Houses	5,665
House to House	420
Houses measured for "Permitted Number"	4,046
Houses let in Lodgings	4
Van Dwellings	8
Common Lodging Houses	30
Houses with reference to application for Council House	70
Houses prior to removal to a Council House	72
Damp Houses	128
Overcrowded Houses	20
Verminous Houses	449
Total Inspections of Housing conditions	10,912
Slaughter-houses	2,763
Butchers Shops	1,008
Cowsheds	58
Dairies and Milk Shops	322
Purveyors of Milk	33
Bakehouses	144
Ice Cream Premises	59
Fried Fish Shops	256
Cafés and Restaurants	46
Total Inspections with reference to Food	4,689
Rivers	10
Refuse Dumps	66
Visits after Infectious Disease	261
Shops	2,082
Factories, Workshops, &c.	155
Schools	43
Places of Entertainment	41
Public Baths	2
Urinals	100
Stables	19
Piggeries	18
Offensive Trade Premises	417
Markets	117

Analysis of Inspections—*continued.*	1936
Smoke Nuisances	49
Cesspools	56
Complaints Investigated	1,029
Visits *re* Works in Progress and Completed	464
Interviews at Office	1,380
At Port	96
Wholesale Warehouses	5
Miscellaneous Inspections	42
Total of other Inspections	6,452
Total Inspections made during the year	22,053

Analysis of Work Carried Out.	1936
Drains inspected	357
Drains smoke tested	82
Drains water tested	96
Drains reconstructed	5
New drains provided	57
Drains repaired	87
Drains unblocked or cleansed	27
New gullies fixed	32
Inspection chambers provided	25
Inspection chambers repaired	9
Ventilating shafts provided	14
Ventilating shafts repaired	17
New urinals provided	5
New water-closets provided	28
New water-closet pans provided	8
New sinks and waste pipes provided	5
New lavatory basins provided	11
Water-closets cleansed	16
Water-closets repaired	45
Total Drainage Works carried out	926

Analysis of Work Carried Out—*continued.*	1936
General repairs of houses	138
Chimney stacks repaired	2
Roofs repaired	73
Eaves-gutters repaired or renewed	32
Rain water pipes repaired or renewed	14
Brickwork repointed	35
Dampness remedied	32
Yards re-paved or yard pavings repaired ...	40
Wash-houses repaired	27
New floors provided	10
Scullery floors concreted	21
Ceiling plaster repaired	29
Wall plaster repaired	25
New fireplaces provided	2
Fire grates repaired	16
Coppers repaired	28
Sash-cords provided	42
Windows repaired	16
New windows provided	2
Door sills provided	3
Ash Bins provided	124
Total works carried out to Houses	711
Premises limewashed	25
Dirty houses cleaned	11
Urinals cleaned	14
Removals of manure	12
Removals of refuse	36
Hydrogen cyanide fumigations	27
Sulphur dioxide fumigations	130
Total of other works carried out	255
Total works carried out during the year ...	1,892

HOUSING.

1.—Inspection of Dwelling-houses during the year :—

(1) (a) Total number of dwelling-houses inspected for housing defects under Public Health or Housing Acts 10,533

(b) Number of inspections made for the purpose ... 11,663

(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 822

(b) Number of inspections made for the purpose ... 1,552

(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation 402

(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation 215

2.—Remedy of Defects during the year without Service of formal Notices :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers 280

3.—Action under Statutory Powers during the year :—

(a)—Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930 :—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs ... ... nil.

(2) Number of dwelling-houses which were rendered fit after service of formal notices :—

(a) By owners ... ... nil.

(b) By local authority in default of owners ... nil.

(b)—Proceedings under Public Health Acts :—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied ... 243

(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—

(a) By owners 13

(b) By local authority in default of owners ... nil.

(c)—Proceedings under Sections 19 and 21 of the Housing Act, 1930:—

(1) Number of dwelling-houses in respect of which Demolition Orders were made ... ... nil.

(2) Number of dwelling-houses demolished in pursuance of Demolition Orders ... ... nil.

(d)—Proceedings under Section 20 of the Housing Act, 1930:—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ... nil.

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit ... nil.

WATER SUPPLY.

Samples taken from Corporation Supplies	21
Samples taken from Private Supplies	5

INFECTIOUS DISEASES.

Infectious Disease inquiries made	261
Infectious Disease cases removed	42

PROGRESS OF NOTICES.

Preliminary:—	
Served	217
Completed	280
Statutory:—	
Served	16
Completed	13
Verbal:—	
Given	110
Completed	113
Letters issued	1,345

Proceedings:—

One prosecution was taken for failing to abate a nuisance from a deposit of foul refuse. Defendant was fined £2 and a Court Order was made to abate the nuisance.

SHOPS' ACTS, 1912-1934.

Visits	2,082
Re-visits	621
New shops registered	1,136
Verbal warnings given for contraventions of the Acts ...	407
Written warnings given for contraventions of the Acts ...	292
Exemption Certificates granted (Shops Act, 1934, Section 10)	9
Exemption Certificates refused (Shops Act, 1934, Section 10)	5

Proceedings :—

During the year 14 prosecutions were taken for contraventions of the Shops (Hours of Closing) Act, 1928. Seven cases were fined five shillings, six cases were fined ten shillings, and one case was dismissed on payment of four shillings costs.

FOOD AND DRUGS (ADULTERATION) ACT, 1928.

The following Table shows the samples taken during the year :—

Article.	Samples taken.		Samples genuine.		Samples adulterated.	
	Formal	Informal	Formal	Informal	Formal	Informal.
Milk	77	—	58	—	19	—
Cream	—	5	—	5	—	—
Butter	—	16	—	16	—	—
Margarine	—	6	—	6	—	—
Lard	—	5	—	5	—	—
Beef Dripping ...	—	1	—	1	—	—
Potted Meat	—	3	—	2	—	1
Meat Paste	—	1	—	1	—	—
Fish Paste	—	2	—	2	—	—
Sausage	—	3	—	3	—	—
Tinned Condensed Milk	—	7	—	7	—	—
Tinned Ale	—	1	—	1	—	—
Tinned Cream ...	—	5	—	5	—	—
Tinned Soup	—	4	—	4	—	—
Tinned Fruit ...	—	5	—	5	—	—
Tinned Vegetables ...	—	1	—	1	—	—
Tinned Fish	—	5	—	5	—	—
Jam	—	2	—	2	—	—
Lemon Curd	—	1	—	1	—	—
Self-raising Flour ...	—	1	—	1	—	—
Coffee	—	1	—	1	—	—
Cocoa	—	1	—	1	—	—
Malt Vinegar ...	1	4	—	3	1	1
Fresh Pears	—	4	—	4	—	—
Fresh Vegetables ...	—	1	—	1	—	—
Camphorated Oil ...	—	1	—	1	—	—
Glycerine	—	1	—	1	—	—
Totals	78	87	58	85	20	2

The following actions were taken during the year :—

Sample No.	Article.	Offence.	Action.
28	Milk	11% added water	Vendor cautioned. Followed by sample No. 32 from producer.
32	Milk	10% added water	Proceedings taken against vendor. Fined £5 including costs.
35	Milk	10% deficiency in milk-fat	"Appeal to cow" sample, following on sample No. 32. Vendor cautioned.
36	Milk	4% deficiency in milk-fat	Ditto.
37	Milk	39% deficiency in milk fat	Ditto.
38	Milk	17% deficiency in milk-fat	Ditto.
45	Milk	6% deficiency in milk-fat	Vendor cautioned.
87	Milk	16% deficiency in milk-fat	Proceedings taken against Vendor. Case dismissed
93	Milk	13% deficiency in milk-fat	Proceedings taken against Vendor. Case dismissed
96	Milk	6% deficiency in milk-fat	Vendor cautioned.
98	Milk	7% deficiency in milk-fat	Vendor cautioned.
99	Milk	5% deficiency in milk-fat	Vendor cautioned.
100	Milk	7% deficiency in milk-fat	Vendor cautioned.
107	Milk	5% deficiency in milk-fat	Vendor cautioned.
109	Milk	3% deficiency in milk-fat	Vendor cautioned.
110	Milk	6% deficiency in milk-fat	Vendor cautioned.
117	Milk	6% deficiency in milk-fat	Vendor cautioned.
119	Milk	1% deficiency in milk-fat	Vendor cautioned.
141	Potted Meat	Contained 4.2% farinaceous matter	Vendor cautioned.
209	Malt Vinegar	Not "malt" vinegar, also 13% deficiency in acetic acid	Proceedings taken against vendor. Fined £1.
229	Milk	3% deficiency in milk-fat	Vendor cautioned.

BACTERIOLOGICAL EXAMINATION OF MILK.

Number of samples examined for the presence of bacteria 83

Number of samples examined by animal inoculation for the presence of tubercle bacilli 10

MILK AND DAIRIES ORDER, 1926.

Number of inspections of Dairies and Milk Shops ... 322

Number of inspections of Purveyors of Milk ... 33

Number of inspections of Cowsheds 58

DISEASES OF ANIMALS ACTS, 1894-1927. TUBERCULOSIS ORDER, 1925.

No cows were sent in by Veterinary Inspectors for slaughter during the year.

ANIMALS (IMPORTATION) ORDER, 1930.

A prosecution was taken during the year against the master of a vessel for bringing a sheep into the Port of Ipswich from a Prohibited Country, in contravention of the Animals (Importation) Order, 1930. The defendant was fined £1.

ANTHRAX ORDER, 1928.

One bullock was found during the year affected with Anthrax, and was dealt with in accordance with the provisions of the Anthrax Order, 1928.

PUBLIC HEALTH (MEAT) REGULATIONS, 1924.

The number of pigs' carcases marked during the year in accordance with Part III. of the Regulations was 978.

The number of inspections of butchers' shops made during the year was 1,008.

SLAUGHTER OF ANIMALS ACT, 1933.

Number of slaughtermen granted licences during the year	59
Number of slaughtermen refused licences during the year	nil.

SLAUGHTER-HOUSES.

The number of private slaughter-houses in use in the Borough at the end of the year was 12.

The number of visits made to the slaughter-houses during the year was 2,763.

The numbers of carcases examined during the year were :—

Cattle	3,787
Sheep	3,520
Pigs	64,779
Calves	310
Total ...	72,396

The number of pigs examined ante-mortem during the year was 26,039.

MEAT AND OTHER FOOD INSPECTION.

The undermentioned foodstuffs were condemned as unfit for human consumption during the year 1936:—

Carcases of beef	23
Beef in lbs.	230
Beasts' offals	7
Beasts' lungs	296
Beasts' forequarters	4
Beasts' heads and tongues	194
Beasts' livers	163
Beasts' kidneys	25
Beasts' spleens	6
Beasts' hearts	4
Beasts' tripe	3
Beasts' mesenteries	66
Beasts' caul fat	10
Beasts' briskets	2
Carcases of veal	5
Calves' plucks	2
Calves' livers	1
Calves' kidney	1
Carcases of mutton	17
Mutton in lbs.	28
Sheep's forequarters	2
Sheep's plucks	10
Sheep's livers	6
Carcases of pork	137
Pork in lbs. (inc. 6,490 heads)	62 tons 8 cwts. 1 qr. 19 lbs.
Pigs' heads	7,213
Pig's shoulder	1
Pigs' fore ends	20
Pigs' legs	67
Pigs' part legs	28
Pigs' skirts	574
Pigs' complete viscera	13
Pigs' plucks	3,132
Pigs' lungs	7
Pigs' livers	7,975
Pigs' kidneys	8,607
Pigs' sweetbreads	118
Pigs' spleens	48
Pigs' maws	110
Pigs' complete intestines	502
Pigs' large intestines	1,152
Pigs' small intestines	1,190
Pigs' part intestines	1,074
Pigs' mesenteries	1,420

Pigs' mesenteric fats	1,147
Fish (stones)	3
Lobster tails (box)	1
Rabbits	7
Gammons of ham	5
Flour (lbs.)	41
Tinned food (tins) :—	
Meat	142
Fish	120
Fruit	2,198
Vegetables	200
Milk	79
Cream	2
Foods	50
Sundries	33
Bottled food (bottles or jars) :—	
Jam	24
Pickles	3
Tongues	11
Meat paste	13
Fish paste	17

During the year, two Magistrate's Orders were obtained for the condemnation of two jars of tongues. No prosecution was taken in respect of the Orders, but the owner was cautioned.

FERTILISERS AND FEEDING STUFFS ACT, 1926.

During the year, three samples of Feeding Stuffs were obtained. One sample was found not to comply with the Statutory Statement, and the Vendor was cautioned.

RATS AND MICE (DESTRUCTION) ACT, 1919.

Visits to premises re rat infestations	200

DISINFECTION.

The following table gives the number of rooms, articles of clothing, etc., disinfected, or dealt with, during the year :—

Infectious Diseases :—	
Rooms	340
Bedding	3,625
Tuberculosis and Cancer :—	
Rooms	115
Bedding	821

Vermin :—	
Rooms	442
Bedding	1,279
Articles from Isolation Hospital ...	9,415
Articles from Open-air School	220
Articles destroyed	159
Library and school books	501
Ambulances	26
Scabies baths given	331
Scabies clothing	3,135

SANITARY CONDITIONS OF MUSIC HALLS AND CINEMAS.

Number of visits paid during performances ... 41

MORTUARY.

During the year, 78 bodies were admitted to the Mortuary. In 65 cases Post-mortem examinations were held.

FACTORIES AND WORKSHOPS, YEAR 1936.

1.—Inspections of Factories, Workshops and Workplaces :—

Premises.	Number of		
	Inspections.	Written Notices.	Occupiers Prosecuted.
Factories (including Factory Laundries)	3	—	—
Workshops (including Workshops Laundries)	112	2	—
Workplaces (other than Outworkers' Premises ...	15	—	—
Total	130	2	—

2.—Defects found in Factories, Workshops and Workplaces :—

Particulars.	Number of Defects.			Number of Offences in respect of which Prosecutions were instituted.
	Found.	Remedied.	Referred to H.M. Inspector	
Nuisances under Public Health Acts :—				
Want of Cleanliness ...	19	19	—	—
Want of Ventilation ...	1	1	—	—
Overcrowding	—	—	—	—
Want of Drainage of Floors	—	—	—	—
Other Nuisances ...	2	2	—	—
Sanitary Accommodation				
Insufficient	2	2	—	—
Unsuitable or defective ...	1	1	—	—
Not separate for Sexes ...	1	1		—
Offences under the Factory and Workshop Acts :—				
Illegal Occupation of Underground Bakehouse (s. 101)	—	—		—
Other Offences	—	—		—
TOTAL	26	26	—	—

3.—Outwork in Unwholesome Premises, Section 108.

Number of inspections of outworkers' premises, 25.

No occasion was found for the service of a Notice under this Section.

H. L. BATY,

Chief Sanitary Inspector.

PORT OF IPSWICH SANITARY AUTHORITY.
REPORT FOR 1936.

I.—Amount of Shipping entering the Port during the year 1936 :—

TABLE A.

		No.	Tonnage.	No. Inspected		No. reported to be defective.	No. of vessels on which defects were remedied.	No. of vessels reported as having or having had during the voyage Infectious Disease on board.
				By the Medical Officer of Health.	By the Sanitary Inspector.			
Foreign	Steamers	137	172,992	—	62	7	7	—
	*Motor ...	89	44,943	—	4	—	—	—
	Sailing ...	2	3,637	—	2	—	—	—
	Fishing ...	—	—	—	—	—	—	—
Total Foreign		228	221,572	—	68	7	7	
Coastwise	Steamers	487	147,840	—	—	—	—	—
	*Motor ...	531	62,713	—	1	—	—	—
	Sailing ...	1,256	78,784	—	13	—	—	—
	Fishing ...	—	—	—	—	—	—	—
Total Coastwise		2,274	289,337	—	14	—	—	—
Total Foreign and Coastwise		2,502	510,909	—	82	7	7	—

* Includes mechanically propelled vessels other than steamers

II.—Character of Trade of Port :—

TABLE B.

(a) Passenger Traffic during the year.—Nil.

(b) Cargo Traffic.—Principal imports : Coal, oil, spirits, grain, timber, road stone, sand, shingle, phosphates, fertilisers, feeding stuffs, and ore. Principal exports : grain, flour, vegetable oils, sugar, oils, spirits, malt, molasses, feeding stuffs, and burnt ore.

(c) Foreign Ports from which vessels arrive : Antwerp (Belgium), Rotterdam (Holland), Hamburg and Stettin (Germany), Dantzig Free State, Kherson, Odessa and Novorossick (Black Sea Ports), White Sea and Baltic Ports, Huelva (Spain), Tunis, Sfax and Casa Blanca (North Africa), Abadan (Persian Gulf), Port Churchill and Adelaide (Australia), Vancouver, Quebec and Montreal (Canada), New Orleans and Florida (U.S.A.), Texas Ports, Buenos Aires, Rosario, San Nicholas, Sante Fe, Villa Constitution (River Plate).

III.—Source of Water Supply :—

(a) For the Port.—Water Supply is obtained from the Ipswich Corporation's water mains.

(b) For Shipping.—Shipping in the Dock and at Cliff Quay obtain water from the Ipswich Corporation's water mains. Shipping at the deep water mooring berth in Butterman's Bay use a water boat from Harwich.

(c) Number of water boats and their sanitary condition.—One water boat is used. The sanitary condition is satisfactory.

IV.—Port Sanitary Regulations, 1933 :—

1. Arrangements for dealing with Declarations of Health.—A Declaration Form is handed to the Master of a vessel from a foreign port either by the Pilot, the Customs Officer or the Port Sanitary Inspector, and, when filled in, is returned to the office of the Port Sanitary Authority either by the Customs Officer or the Port Sanitary Inspector.

2. Boarding of vessels on arrival :—

Vessels from foreign ports are boarded by an Officer of the Port Sanitary Authority either at the deep water mooring berths at Butterman's Bay, which is situated about six miles down the river, or at Cliff Quay, Ipswich, or at the Ipswich Dock.

3. Notification to the Authority of inward vessels requiring special attention (wireless messages, land signal stations, information from pilots, Customs Officers, etc.) :—

Arrangements have been made with the Customs Officers to notify to the Port Sanitary Authority any inward vessel requiring special attention; also, for wireless messages received by local shipping agents, in accordance with the provisions of Article 6 of the Regulations, to be forwarded to the office of the Port Sanitary Authority.

4. Mooring stations designated under Article 10 : (a) within the docks; (b) outside the docks :—

(a) The established inner mooring station is situated at Cliff Quay, Ipswich.

(b) The established outer mooring station is situated at the Anchorage at Butterman's Bay.

5. Particulars of any standing exemptions from the provisions of Article 14 :—

A standing exemption from detention under Article 14 has been granted by the Medical Officer in respect of all unhealthy ships, except those unhealthy on account of cholera, plague, yellow fever, typhus, smallpox or chickenpox.

6. Experience of working of Article 16 :—

No difficulty arose during the year in carrying out the restrictions on boarding or leaving a ship arriving from a foreign port.

7. What, if any, arrangements have been made for :—

(a) Premises and waiting rooms for medical examination.

(b) Cleansing and disinfection of ships, persons and clothing and other articles.

(c) Premises for the temporary accommodation of persons for whom such accommodation is required for the purpose of the Regulations.

(d) Hospital accommodation available for Plague, Cholera, Yellow Fever, Smallpox and other infectious diseases.

(e) Ambulance transport.

(f) Supervision of contacts.

(a) Medical examinations are carried out on board the ship concerned.

(b) On a ship where infectious disease has occurred, disinfection of the infected parts of the ship is carried out by the staff of the Port Sanitary Authority. A cleansing station for persons is established at the office of the Port Sanitary Authority, and further facilities for the cleansing of persons exist at the Ipswich Borough Isolation Hospital and at the Ipswich Smallpox Hospital.

(c) Temporary accommodation is available at the Ipswich Borough Isolation Hospital for persons requiring such accommodation for the purposes of the Regulations.

(d) A smallpox hospital (24 beds) is maintained by the Ipswich Sanitary Authority, and is available for cases of smallpox in the Port. Cases of other infectious diseases are accommodated at the Ipswich Borough Isolation Hospital.

(e) A motor ambulance, and a convertible motor van, are available for transport purposes.

(f) Contacts proceeding to places outside the Borough and Port of Ipswich are notified to the Medical Officer of Health of the district to which they are proceeding. Contacts remaining on the ship are kept under observation daily by an officer of the Port Sanitary Authority.

8. Arrangements for the bacteriological or pathological examination of rats for plague :—

The examination of rats for plague is carried out at the laboratory of the East Suffolk County Council, at Ipswich.

9. Arrangements for other bacteriological or pathological examinations :—

   Other bacteriological or pathological examinations are carried out at the Ipswich Public Health Department, the East Suffolk County Council Laboratory, and the East Suffolk and Ipswich Hospital, at Ipswich.

10. Arrangements for the diagnosis and treatment of venereal disease among sailors under international arrangements :—

    Diagnosis and treatment are carried out at the East Suffolk and Ipswich Hospital.

11. Arrangements for the interment of the dead :—

    Nil.

12. Other matters, if any, requiring or receiving attention :—

    Nil.

Table C.

Cases of Infectious Sickness landed from Vessels :—

Disease.	Number of Cases during the year.		No. of Vessels concerned.	Average number of Cases for previous 5 years.
	Passengers.	Crew.		
—	—	—	—	—

Table D.

Cases of Infectious Sickness occurring on Vessels during the voyage, but disposed of prior to arrival :—

Disease.	Number of Cases during the year.		No. of Vessels concerned	Average number of Cases for previous 5 years
	Passengers.	Crew.		
—	—	—	—	—

V.—Measures Against Rodents.

(1) Steps taken for detection of rodent plague.

(a) In ships in the Port.

(b) On quays, wharves, warehouses, etc., in the vicinity of the port.

(a) Ships visited by the Port Sanitary Inspector have enquiry and search made on board for unusual mortality of rats or mice.

(b) Premises in the vicinity of the Dock and quays are visited from time to time by the Port Sanitary Inspector and similar enquiries and search are made.

(2) Measures taken to prevent the passage of rats between ships and the shore.

No evidence has been found of rat migration from ship to shore during the year, and special measures, such as rat-guarding mooring ropes, are not taken.

(3) Methods of deratisation of (a) Ships, (b) Premises, in the vicinity of docks or quays.

(a) The Port of Ipswich is not an " approved " port for the purposes of Article 28 of the International Sanitary Convention, 1926. Ships requiring deratisation have therefore to proceed to an " approved " port, the nearest being the ports of London or Dover in the South or the ports of Hull and Goole in the North.

(b) Deratisation of premises in the vicinity of the Dock and quays is carried out by the occupier of the premises concerned, the usual method being the use of traps and poisoned baits.

(4) Measures taken for the detection of rat prevalence in ships and on shore.

The usual inspections are made by the Port Sanitary Inspector. It has not been found necessary to take special measures such as the employment of a full-time rat-catcher.

(5) Rat-proofing.

(a) To what extent are docks, wharves, warehouses, etc., rat proof?

(b) Action taken to extend rat-proofing.

(i) In ships; (ii) on shore.

(a) Many of the buildings, etc., in the vicinity of the dock and quays are very old and are not considered rat-proof. Recently-erected buildings are designed with rat-proofing in mind and are more satisfactory.

(b) Advice is given by the Port Sanitary Inspector to the person concerned where evidence is found of the necessity of extension of rat-proofing of either ships or buildings.

RATS DESTROYED DURING THE YEAR.

TABLES E. AND F.

(1) On vessels, (2) On Docks, Quays, Wharves and Warehouses.

An Official Rat-catcher is not employed by the Ipswich Port Sanitary Authority, and the numbers and species of rats destroyed by the occupiers of the vessels and the buildings in the Port are not known.

Table G.

Measures of rat destruction on Plague "infected" or "suspected" Vessels or Vessels from plague infected ports arriving in the port during the year.

No such vessel arrived in the Port of Ipswich during the year.

Table H.

Deratisation Certificates and Deratisation Exemption Certificates issued during the year.

Ipswich is not an "approved" port for this purpose and therefore no certificates were issued.

VI.—Hygiene of Crews' Spaces.

Table J.

Classification of Nuisances.

Nationality of Vessel.	No. Inspected during the year.	Defects of original construction.	Structural defects through wear and tear.	Dirt, vermin and other conditions prejudicial to health.
British ...	32	--	—	2
Other Nations...	50	-	-	5

VII.—Food Inspection.

(1) Action taken under the Public Health (Imported Food) Regulations, 1925, the Public Health (Imported Food) Amendment Regulations, 1933, the Public Health (Imported Milk) Regulations, 1926, and the Public Health (Preservatives, etc., in Food) Regulations, 1925 to 1927 :—

No action was taken under the above-mentioned Regulations, in the Port of Ipswich, during the year.

(2) Shell-fish. Information respecting any shell-fish beds or laying within the jurisdiction of the P.S.A., stating whether they are in the opinion of the Medical Officer liable to pollution. Report of any action, taken under the Public Health (Shell-fish) Regulations, 1934, or the Public Health (Cleansing of Shell-fish) Act, 1932 :—

There are oyster beds or layings within the jurisdiction of the Ipswich P.S.A. No action has been taken during the year under the above-mentioned Regulations and Act.

The oyster beds are not liable to pollution.

The oysters are not retailed, but are sold wholesale to Whitstable buyers, who relay them on their grounds in Kent.

Oysters are derived from Brightlingsea and Whitstable, escallops from Plymouth and Northern France, cockles from Local Coast, whelks from Local Coast and Kings Lynn, and winkles from Mersea and Brightlingsea.

(3) Number of Samples of Food examined by :—

(a) Bacteriologist.

(b) Analyst.

No samples of food were examined in the Port of Ipswich during the year.

H. L. Baty,

Chief Port Sanitary Inspector.



County Borough of Ipswich.

School Medical Officer's REPORT

1936.

I.

STAFF OF THE SCHOOL MEDICAL SERVICE.

DECEMBER, 1936.

Medical Staff :

A. M. N. PRINGLE, M.B., C.M. (EDIN.), D.P.H. (CAMB.).
Medical Officer of Health and School Medical Officer.

A. W. GAYE, B.A., M.B., B.C., D.P.H. (CAMB.), M.B., CH.B. (MANC.).
Deputy Medical Officer of Health and Assistant School Medical Officer.

R. PHILPOTT, M.A., M.R.C.S. (ENG.), L.R.C.P. (LONDON).
Assistant School Medical Officer (Part time).

Dental Staff :

T. A. EDMONDSON, L.D.S., R.C.S., Eng.
School Dental Surgeon.

A. W. T. WARD, L.D.S., R.C.S., Eng.
Assistant School Dental Surgeon.

R. CUTHILL, L.D.S., U. Liverpool.
Assistant School Dental Surgeon.

Nursing Staff :

MISS M. SANDBACH, MISS F. ILETT, MISS L. COOKE, and part-time service of four of the Health Visitors of the Public Health Staff.

Clerical Staff :

MISS E. RENACRE (part-time).
MISS M. GOODERHAM.
MISS D. CASEY.
MISS B. TAYLOR (part-time)
MISS B. PIGGOTT.

County Borough of Ipswich.

PUBLIC HEALTH DEPARTMENT,
ELM STREET,
IPSWICH.

April 30th, 1937.

LADIES AND GENTLEMEN,

I have the honour to present the Report on the Medical Inspection of School Children during 1936.

The principal event in the evolution of the School Medical Service during the year was the opening of the Branch Clinic on the Gainsborough Estate.

The success that has attended its opening indicates that it is unlikely to be the last of its kind, as it fills a public need.

I thank the members of the Education Committee and the Staff for their valuable assistance.

I tender special thanks to those members of my own staff particularly engaged in the work of the School Medical Service.

I have the honour to be,

Ladies and Gentlemen,

Your obedient servant,

A. M. N. PRINGLE.

II.

CO-ORDINATION.

The School Medical Officer is also Medical Officer of Health and therefore no difficulty arises in co-ordinating the work of both Departments.

The completed records of children attaining the age of five years are transferred from the Infant Welfare Centre to the School Clinic, and the information available in such records is a great help in preparing the School Medical Schedules.

At the end of school life any records of interest from the Public Health point of view, i.e., of Tuberculous or suspected Tuberculous children, Mental Defectives, etc., are transferred to the appropriate Departments.

In short it may be said that the closest co-operation exists between all Public Health Agencies and the School Medical Officer.

III.

SCHOOL HYGIENE.

The sanitation of the schools receives the regular attention of the Sanitary Inspectors, whose recommendations are passed through the School Medical Officer to the appropriate authorities.

IV.

MEDICAL INSPECTION.

(a) MEDICAL STAFF.

The Routine Inspection includes the usual three groups, viz. Entrants (5 years old), Intermediates (8 years old), and Leavers (12 years old).

The School Medical Officers visit all the schools in the town for this purpose accompanied by the School Nurses. Lists of children are taken from the School Registers at the various age groups and a programme of visits is prepared, so that Teachers are warned in good time of the intended visit. Invitations to parents are sent out in every case.

The approved type of schedule is prepared for each child and is carried in a folder throughout school life.

During 1936 the number of children examined at the Routine Medical Inspections was 2,898 or about 28% of the average attendance.

This figure compares with 3,316 in 1935 and 3,547 in 1934.

The decrease in the number examined in 1936 was partly due to absence through influenza of one member of the medical staff, and partly to changes in staff.

(b) Nursing Staff.

Cleanliness Inspections in the Schools by the School Nurses.

Every school is visited and every child seen as many times a year as the staff permits, and the total number of examinations in 1936 was 42,443. The average number of visits per school was 5.9. Appropriate action is taken in all cases of Pediculosis, and such cases are followed up until the desired end is attained. The increase in numbers under this heading was due to the appointment of an additional nurse in connection with the new clinic.

The Health Visitors employed by the Public Health Department also visit schools when the prevalence of infectious diseases indicates the advisability of such a course, and their services in this connection are extremely valuable.

(c) Inspection Clinics.

The main Inspection School Clinic is situated in the Public Health Department, Elm Street. This Clinic is open every day and a Medical Officer is in attendance every morning session, and also on some afternoons for special purposes, i.e., examination of Mental Defectives, Children with Defective Vision, etc.

The Branch School Clinic, in Clapgate Lane, to serve the new Housing Estates, was opened on April 16th, 1936, and has proved of great benefit to parents living in the district it serves. The Clinic is open every day, but a School Medical Officer attends at present on three morning sessions only per week, whilst visits are paid on certain afternoons for special purposes.

Cases are referred to both clinics by various authorities, teachers, parents and others, and the Inspection Clinics act as "clearing houses" in this respect. Children requiring treatment are referred to the family Doctor, the local Hospital or Treatment Clinic, or the Tuberculosis Officer, or the Sunlight Clinic, and so on.

A large number of the referred children are found to be unfit for school, and exclusions are granted for varying reasons and periods.

The following table illustrates the extent to which the Main School Clinic has been used since its inception :—

Period.	Numbers of Children attending at Clinic.	Total Attendances at Clinic.	Exclusions.	
			Granted	Not Granted.
Average 1912-1915	—	4,568	1,004	—
1916-1920	1,850	6,611	1,525	325
1921-1925	2,846	10,726	1,930	910
1926-1930	4,193	13,189	2,520	1,673
1931	4,668	12,148	2,239	2,429
1932	4,888	14,229	2,299	2,589
1933	4,756	13,308	2,035	2,721
1934	4,755	12,074	1,898	2,857
1935	4,817	13,043	1,779	3,038
1936	5,343	19,108	2,276	3,067

The figures indicate a considerable increase in the work of the Clinic in Elm Street, and they are especially notable in view of the fact that since the end of April the children living on the New Estates have been diverted to the Branch Clinic. In spite of this the number of attendances at the Main Clinic was by far the largest ever recorded.

The Branch Clinic attendances for the eight months of 1936 are set forth below :—

Period	Numbers of Children attending at Clinic.	Total Attendances at Clinic.	Exclusions.	
			Granted.	Not Granted.
8 months, 1936	1,590	4,108	489	1,101

These tables indicate, in the most convincing manner, the need for these clinics, and the extent of their appreciation by the public.

V.

FINDINGS OF MEDICAL INSPECTION.

PRELIMINARY.

Routine Medical Examinations of Children in the three age groups (5, 8 and 12 years), together with number of defects found at such examinations :—

	1935.			1936.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Entrants—						
No examined ...	464	460	924	721	643	1364
No. of defects ...	60	68	128	73	49	122
Percentage ...	12 9	14 8	13 9	10 1	7.6	8 9
Intermediates—						
No examined ...	542	554	1096	488	634	1122
No of defects ...	69	77	146	72	78	150
Percentage ...	12.7	13 9	13 3	14 7	12 3	13.4
Leavers—						
No examined ...	668	628	1296	64	348	412
No of defects ...	79	103	182	4	45	49
Percentage ...	11.8	16 4	14 0	6.2	12.9	11 9
Total						
No. examined ...	1674	1642	3316	1273	1625	2898
No of defects ...	208	248	456	149	172	321
Percentage ...	12 4	15 0	13 7	11 7	10 5	11.1

Examination of "leavers" was not completed during the year owing to illness of Staff, but there was an increase in the numbers examined in the two other age groups.

MALNUTRITION.

Table II.B. shows 2,898 examinations in Elementary Schools and gives the numbers and percentage of those falling into the four groups as required by the Board, namely:—Excellent, Normal, Sub-normal, Bad.

Below are Tables comparing these figures.

	1935				1936			
	Excellent	Normal	Slightly subnormal	Bad	Excellent	Normal	Slightly subnormal	Bad
Entrants	10.8%	60%	28.8%	.4%	9.45%	74.04%	16.05%	.44%
Inters.	18.6%	59.3%	21.6%	.5%	12.65%	70.41%	16.6%	.26%
Leavers	15.3%	67.4%	17.1%	.2%	12.62%	71.11%	16.26%	—

Normal, or better.		
	1935	1936
Entrants	71%	83%
Intermediates ...	78%	83%
Leavers	82%	83%

So far as these figures may be taken to be of value, they appear to show that the percentage of children with sub-normal nutrition was the same in the three age groups, but in 1935 it was greatest in the five-year-olds. It should also be noted that no one was classified very bad in the third age group, 12-year-olds.

Examinations in the Secondary Schools show a 7% higher figure.

In 1935 two examiners were responsible for the figures; in 1936, owing to a change of staff after three months, three opinions enter into the calculation.

It would be impossible to say at the present time what effect the provision of milk and meals is having upon these returns, though the effect in individual cases is easily observed.

In examinations with a view to recommendation of milk or meals a reasonably broad medical point of view is taken in assessing the child's requirements, but it seems foolish to wait until lack of food has shown itself in bodily ailment.

It appears reasonable that milk or meals should be provided by the Committee concerned with children in all cases where the family earnings per head, after deducting rent, is shown insufficient.

A. W. GAYE,
Deputy School Medical Officer.

(*b*) UNCLEANLINESS.

A Table giving particulars of the work carried out in this section together with the numbers found unclean is appended :—

	1935.	1936.
No. of visits by Nurses to Schools	88	165
Average per school	3.4	5.9
No. of examinations	26,753	42,443
No. of children found unclean	239	606
Percentage of average attendance found unclean	2 26	2 28
Percentage of total examined found unclean ...	0 89	1.42

Eight " 24-hours " notices were served.

In no case was it necessary to take legal proceedings, but 3 children were cleansed by the Authority.

145 children were excluded from school for verminous conditions, involving a loss of 1,002 school days.

The increases in the number of visits and examinations are due to the fact that three nurses are now employed as compared with two in former years.

(*c*) MINOR AILMENTS AND DISEASES OF THE SKIN.

These complaints include Ringworm, Scabies, Impetigo, etc.

The following Table gives the numbers found at routine and special inspections during the past three years :—

	1934.	1935.	1936.
Ringworm —			
Scalp	14	10	8
Body	3	6	9
Scabies	27	31	23
Impetigo	151	203	155

The number of children excluded in these three groups was 161, and the days lost 3,637.

There is a slight increase in the number of children excluded, but a decrease in the days lost.

Impetigo showed a decrease on the previous year.

Although the prevalence of Ringworm is not nearly as great as it was, it still continues to crop up.

(d) Visual Defects and External Eye Diseases.

Table II. of the Statistical Tables indicates that 273 children were found during the year at Routine or Special Inspections to be suffering from defective vision, whilst another 35 were found to squint and 219 had other eye disorders.

Special Eye Clinics are held each week, and during the year 428 children were examined, the total visits being 744. These figures are slightly lower than those of 1935.

The number of glasses prescribed or to be changed was 319, and of that number 311 have been obtained to date—a very satisfactory figure.

The Education Committee's Scheme which provides glasses, either free of cost or on part payment in certain cases, materially assisted in the attainment of this high percentage.

The defects found were :—

Hypermetropia	69
Hypermetropic Astigmatism ...	33
Myopia	88
Myopic Astigmatism	15
Mixed Astigmatism	5
Squint	19
All Others	9

5 children with defective vision were referred to the Eye Specialist at the local Hospital.

(c) Nose and Throat Defects.

The number of children found to require treatment (excluding other conditions usually of a temporary and minor character only) was 107, which was made up as follows :—

Chronic Tonsillitis only ...	46
Adenoids only	23
Chronic Tonsillitis and Adenoids	38

In addition 394 children were marked for observation under this heading.

(f) Ear Disease and Defective Hearing.

Table II. indicates that the following were referred for treatment during 1936 :—

Defective Hearing	15
Otitis Media	61
Other Ear Diseases	70

(g) Dental Defects.

The Report of the School Dental Surgeon is given under the section "Arrangements for Treatment."

856 children were directly referred to the dentist as the result of medical inspection

(*h*) Orthopaedic and Postural Defects.

52 children were found to require treatment, 15 of whom were new cases. 20 children with Postural defects and 8 with other orthopædic defects, 2 of whom were discovered during the year, require to be kept under observation.

Most of those requiring treatment attended for massage, electricity and exercises at the East Suffolk and Ipswich Hospital, either having been referred direct or by their own doctor. The attention of the head teachers was also called to these children, so that special exercises might also be given at school so far as practicable.

The year marked the inauguration of a notable addition to the surgical equipment of the East Suffolk and Ipswich Hospital, viz., the appointment of an Orthopædic Surgeon, and the opening of a special Department for this highly important branch of surgical treatment It is very necessary that this Department and the School Medical Service should work in close collaboration.

(*i*) Heart Disease and Rheumatism.

The following cases of Heart Disease were discovered at Routine Medical Inspection or at the School Clinic during the year :—

Organic	...	6	for treatment,	8	for observation.
Functional	...	2	,, ,,	26	,, ,,

There were 8 cases of Rheumatism in whom no heart lesion was discovered.

The extent to which crippling Diseases of the Heart in school children is present in our school population is under investigation. So far it has become evident that, if the best results are to be obtained, the services of a Practitioner possessed of special knowledge of these conditions should be made available for the proper classification of these cases, so that the most appropriate methods of treatment or management may be decided upon, and the necessary steps taken to have them carried out.

(*j*) Tuberculosis.

The number of cases falling into this group during 1936 is given as under :—

Pulmonary Tuberculosis	...	8
Non-Pulmonary ,,	...	20
Suspected ,,	...	29

These cases are effectively covered by the existing scheme.

(*k*) Other Defects and Diseases.

The figures were slightly above those of the previous year.

VI.

FOLLOWING UP.

Following up defects found at previous Medical Inspections is carried out by the School Medical Staff and School Nurses.

The number of children seen during 1936 was 831, and the examinations totalled 1,209. These examinations are carried out at school at the same time as Routine Medical Inspection.

The School Nurses also followed up absences from school reported by Head Teachers.

In special cases the Nurses also visit the child at school and (or) in the home.

In my opinion the Medical Staff is insufficient to enable a full scheme of following up to be carried out as it should be.

Following up, to be of real value, means, in many cases, detailed examinations. Such examinations require time so that they are unhurried, with full opportunity to consider each case. Examinations conducted under such conditions are of real value, whereas crowded clinics or following up, means hurry, with its consequent depreciation of value.

VII.

ARRANGEMENTS FOR TREATMENT.

The Local Authority undertakes at the School Treatment Clinics or by arrangement with other Authorities, treatment as under :—

(a) Minor ailments at the Main and Branch Clinics.

(b) Dental defects at the Dental Clinics.

(c) Visual defects at the Eye Clinic.

(d) Artificial Sunlight treatment at the Public Health Department.

(e) Surgical treatment of Tonsils and Adenoids at the East Suffolk and Ipswich Hospital.

(f) X-Ray treatment of Ringworm at the same Institution.

(g) Tuberculous or suspected Tuberculous children at Sanatorium or Hospital.

(a) Minor Ailments Treatment Clinic.

This Clinic has been established for many years and deals with all types of minor ailments.

The undermentioned Table gives the numbers of children treated and the diseases or defects dealt with.

Disease or Defect	Main.			Branch.
	1934	1935	1936	1936
Number of children treated ...	689	849	717	689
Total visits paid	3,234	4,171	4,468	3,361
Ringworm—Scalp	1	1	4	1
Skin	4	1	1	2
Scabies	25	31	18	5
Impetigo	22	40	27	56
Other Skin Diseases ..	100	192	100	153
Minor Eye Defects	113	109	72	47
Minor Ear Defects	16	41	45	34
Nose and Throat Defects ...	5	11	—	17
Minor Injuries	266	283	314	273
Miscellaneous	137	140	136	101
Total	689	849	717	689

This Table indicates that, although fewer children attended the Main Treatment Clinic than in 1935, a greater number of attendances were made. Here again the effect of the Branch Clinic removals has not been felt at Elm Street.

The Treatment Clinic at the Branch fulfils a very useful purpose and the cases treated are greater in proportion to the school population. This may be accounted for by the position of the Clinic and the distance of the Estates from the centre of the town and the Hospital.

The Authority has an arrangement with the local General Hospital for the X-Ray Treatment of Ringworm at a cost of £2 2s. 0d. per case, treated to a successful conclusion.

The number so treated was very small and last year 2 cases were referred, as compared with 6 in 1935.

Cases of Scabies receive special baths (chiefly sulphur) at the Disinfecting Station attached to the Public Health Department. 356 baths were given to children during the year, and thousands of articles of clothing were disinfected at the same time.

Minor Eye Defects included children with Blepharitis, Conjunctivitis, Keratitis and Corneal Ulcers.

Minor Injuries.—All children injured in schools or playgrounds are referred first of all to the Treatment Clinic, and if the injury is severe the patient is referred at once to the local Hospital.

(*b*) DENTAL DEFECTS.

The following is the report of Mr. T. A. Edmondson, the Senior School Dental Surgeon.

REPORT ON THE WORK OF THE SCHOOL DENTAL DEPARTMENT FOR THE YEAR 1936.

ROUTINE WORK.

During the year 23 Elementary and the Northgate Schools were visited, the number of departments being 35, viz., infants 6, girls 8, boys 10, mixed 3, and junior 8.

Dental treatment at the Branch Clinic was commenced on April 17th, 1936.

The schools served by the Branch Clinic are: South Eastern Senior Boys' School, South Eastern Senior Girls' School, Nacton Road Junior Mixed School, Priory Heath Junior Mixed School, Gainsborough Junior Mixed School, and Greenwich Junior Mixed School.

All these schools have been visited.

The following Table gives details of ages of the children inspected:—

TABLE A.

Ages.	1936			1935
	Main Clinic.	Branch Clinic.	Total	Main Clinic
5 years	490	327	817	996
6 ,, ...	511	279	790	1,011
7 ,, ...	558	366	924	1,076
8 ,, ...	617	333	950	1,129
9 ,, ...	712	282	994	1,210
10 ,, ...	782	247	1,029	1,069
11 ,, ...	836	350	1,186	970
12 ,, ...	1,012	229	1,241	1,088
13 ,, ...	1,096	248	1,344	1,163
14 ,, ...	396	44	440	419
15 ,, and over ...	283	—	283	242
Total inspected ...	7,293	2,705	9,998	10,373
First inspections ...	969	378	1,347	1,701
Re-inspections ...	6,324	2,327	8,651	8,672

Of the total number inspected only 1,278 or 12.78 per cent. had every tooth perfectly sound, whilst 2,750 or 27.51 per cent. had mouths containing 6,597 septic temporary teeth, an average of 2.40 each.

At the Branch Clinic only 78 or 2.51 per cent. had every tooth perfectly sound, whilst 985 or 36.41 per cent. had mouths containing 2,207 septic temporary teeth, an average of 2.24 each.

The following Table gives comparative figures :—

TABLE B.

	1936		1935
	Total Children inspected (including Branch)	Branch only.	Total Children inspected.
Percentage of children having septic teeth	27.51	36.41	31.50
Average number of septic teeth per child	2.40	2.24	2.58
Percentage with all sound teeth	12.78	2.51	15.19

Of the total number inspected only 4,477 or 44.78 per cent. had all the permanent teeth present in the mouth perfectly sound, whilst 3,911 or 39.12 per cent. had decayed permanent teeth which were savable.

So far as the Branch Clinic is concerned, 1,193 or 50.17 per cent. had all the permanent teeth present in the mouth perfectly sound, whilst 997 or 36.89 per cent. had decayed permanent teeth which were savable.

Attention is drawn to the very low proportion of children with sound teeth in the New Estates. These are the very areas in which there was the greatest opposition to dental treatment, so that it is, after all, not a matter of surprise.

The following comparative Table gives the necessary details :—

TABLE C.

Number of Permanent teeth decayed but savable.	1936		1935
	Total children inspected (including Branch).	Branch only.	Total children inspected.
1	1,734	503	1,570
2	1 337	324	1,326
3	473	97	492
4	283	57	349
5	47	10	49
6	22	6	19
7	8	—	10
8	4	—	6
9	1	—	—
10	1	—	1
11 and 12	—	—	—
Over 12	—	—	1
Total number of Children with decayed permanent teeth savable	3,910	997	3,823
Total number of decayed permanent teeth savable ...	7,433	1,756	7,594
Percentage of children examined	39.12	36.89	36.86

7,995 permanent teeth filled in previous years were found to be artificially sound.

Table D. gives details regarding children selected for treatment :—

TABLE D.

	1936		1935
	Total Children inspected (including Branch).	Branch only.	Total Children inspected.
Children inspected	9,998	2,705	10,373
Selected for treatment ...	6,171	1,770	6,382
Percentage selected	61.72	65.43	61.52
Extractions only	35.12	40.79	39.22
Fillings only	42.07	34.01	37.90
Fillings and extractions ...	21.39	22.37	21.81
Dressings only	1.42	2.82	1.07

During the year 6,145 letters (including 1,770 from the Branch Clinic) were sent to parents inviting consents to treatment; 5,737 letters (including 1,596 relating to the Branch Clinic) were returned, of which 60.43 per cent. were consents (Branch 63.22 per cent.) and 39.57 per cent. refusals (Branch 36.88 per cent.).

The following Table indicates the variation in the percentage of consents to treatment :—

TABLE E.

Year	Selected for treatment.	Percentage of consents.
1935	6,382	59.69
1936	6,171	60.43

It is interesting to compare the percentage of consents to treatment in the schools in the area before and after the opening of the Branch Clinic.

	1935.	1936.
Gainsborough	63.20	63.83
Priory Heath	54.26	65.75
Greenwich	55.65	60.00
South Eastern Girls ...	70.14	47.29
South Eastern Boys ...	69.40	63.49
Nacton Road Junior Mixed ...	74.75	76.49

Presumably the Nacton Road Junior children and the South Eastern boys and girls come from the same homes, yet we find the girls taking very much less interest in their teeth than either the boys or junior children.

The Health Visitors interviewed the parents of 607 refusal cases 378 repeated their refusal to accept treatment, 229 agreed to have treatment, and to these appointments were sent, but 144 failed to attend the clinic, thus only 14.00 per cent. of those visited were actually treated

Table F. indicates the number of teeth extracted and the number of fillings :—

TABLE F.

		1936		1935
		Total Children (including Branch).	Branch only.	Total Children
Children treated ...		4,719	1,033	4,982
Teeth Extracted	Temporary ...	5,612	1,408	6,639
	Permanent ...	1,093	197	1,214
	Total ...	6,705	1,605	7,853
Number of Fillings	In Temporary teeth ...	120	59	133
	In Permanent teeth ...	4,128	591	4,273
	Total ...	4,248	650	4,406

SUMMARY OF WORK DONE DURING 1936.

	Total (including Branch).	Branch only.
Number of schools visited	23	4
,, ,, visits to schools	101	22
,, ,, departments visited	35	6
,, ,, half days devoted to inspections and talks to parents	108	25
,, ,, mouths examined at dental inspection ...	9,998	2,705
,, ,, letters sent	6,145	1,770
Actual number of children treated	4,719	1,033
Number of attendances made	6,501	1,327
,, ,, appointments made	6,944	1,586
,, ,, appointments broken	1,508	387
,, ,, amalgam stoppings in temporary teeth ...	26	—
,, ,, amalgam and cement stoppings in temporary teeth	4	—
,, ,, cement stoppings in temporary teeth ...	90	59
,, ,, amalgam stoppings in permanent teeth ...	2,566	477

	Total (including Branch).	Branch only.
Number of amalgam and cement stoppings in permanent teeth	1,130	71
,, ,, cement stoppings in permanent teeth ...	410	38
,, ,, root canal treatments	22	5
Total number of stoppings	4,248	650
Number of permanent teeth stopped	3,746	537
,, ,, temporary teeth extracted	5,612	1,408
,, ,, permanent teeth extracted	1,093	197
,, ,, local anæsthetic cases	339	70
,, ,, nitrous oxide administrations	2,979	817
,, ,, sundry dressing in temporary teeth ...	58	2
,, ,, sundry dressings in permanent teeth ...	2,446	117
,, ,, children for whom advice was sought ...	546	83
,, ,, children brought to clinic who then refused treatment	47	9
,, ,, children treated who had been treated in former years	2,735	491
,, ,, talks to parents at schools	7	3
,, ,, employment cases treated	33	3
,, ,, regulation plates fitted	7	1
,, ,, inclined planes fitted	2	—
,, ,, dentures fitted	1	—

The Radiologist at the East Suffolk Hospital kindly took four X-Rays on our behalf during 1936.

During the year £120 7s. 6d. was received in payment for treatment from 4,300 children, an average of 6¾d. each.

T. A. EDMONDSON,

School Dental Surgeon.

(c) VISUAL DEFECTS.

Dealt with in earlier part of the Report.

(d) ARTIFICIAL SUNLIGHT.

An Artificial Sunlight Clinic has been established in the Public Health Department for some years, and deals with children of all ages.

During the year under review, the number of children of school age who received treatment was 83 and they paid 1,659 visits.

The defects for which treatment was given included :—

Anæmia and Debility	41
Catarrhal and Bronchial Infections	7
Enlarged Glands (neck) ...	13
Sub-normal Nutrition	5
Tuberculosis Group	10
Pre-Tubercular Debility ...	5
Psoriasis	1
Poor Circulation	1

(e) Surgical Treatment of Tonsils and Adenoids.

The Education Committee has had, for some years, a working arrangement with the local General Hospital for the surgical treatment of Tonsils and Adenoids.

In cases where an operation is considered necessary, the parent is given a letter to present to the Ear, Nose and Throat Specialist at the local Hospital. The note is returned to the School Medical Officer with the Surgeon's recommendations, and if an operation is considered to be necessary, arrangements are made by the Hospital Authorities to carry out such recommendation.

The Education Committee pays the Hospital the following agreed charges in all cases where the parent is not a member of the Hospital "Contributor's Scheme" :—

Per Visit	3/6
Per Operation	10/-

The Hospital Authorities have provided special accommodation for this type of case, and all children under this Scheme are dealt with as in-patients.

The agreed figure is 6/- per day under 10 and 8/- per day over that age, in the case of Non-Contributors only. The total cost to the Committee under this heading in 1936 was £29 3s. 6d.

The following Table gives figures for the last three years :—

	1934	1935.	1936.
Number of Children referred to Hospital ...	123	116	130
Total attendances (out-patients)	149	110	107
Operations carried out	67	94	72
In-patient days { Over 10	34	158	78
In-patient days { Under 10	204	474	320

(f) X-Ray Treatment of Ringworm.

See "Minor Ailments."

(g) Tuberculosis or Suspected Tuberculosis.

The number of school children who were admitted to Institutions during 1936 for the treatment of Tuberculosis or Suspected Tuberculosis is shown below :—

INSTITUTION	Boys.	Girls.	Total.
Ipswich Sanatorium	30	31	61
East Suffolk & Ipswich Hospital (for treatment of Surgical Tuberculosis)	4	9	13
Ipswich Isolation Hospital—			
(a) Pulmonary Tuberculosis ...	—	2	2
(b) Surgical Tuberculosis	4	2	6
TOTAL	38	44	82

The number of children sent to Institutions in this connection during 1935 was 48.

VIII.

INFECTIOUS DISEASES.

The close co-operation of the Public Health and School Medical Departments ensures a very complete scheme for detecting and preventing the spread of Infectious Diseases amongst the School Population.

The home of every patient notified as suffering from an Infectious Disease is visited by an Officer of the Public Health Department, who records on a sheet the names of all persons residing therein.

The school children in such a house are excluded from Day and Sunday Schools (Diphtheria 10 days, Scarlet Fever 8 days, if the patient is removed to the Isolation Hospital), and notice is sent to the Education Office to that effect. The Education Office notifies the Head Teachers.

Furthermore, in the case of Diphtheria, swabbing is recommended, and parents may arrange this with the family doctor or with the Health Department.

During 1936 the notifications of Infectious Disease of children of school age and removals to Hospital were as under :—

	Notified.	Removed.
Scarlet Fever ...	116	104
Diphtheria	73	71

The number of cases notified and removed during 1936 was considerably below 1935.

Another arrangement which helps considerably is the notification by Head Teachers of absences from school. These cards are passed as soon as received to the Health Visitors, who visit the homes and advise parents.

In cases of minor Infectious Diseases (the non-notifiable group) exclusions are granted as necessary, and leaflets of instruction and advice are left with parents in all cases where a doctor has not been called in.

The exclusions granted by Health Visitors in the minor Infectious Disease group included the following :—

Measles	1,517
Chicken Pox	270
Whooping Cough	307

These figures are all higher than those of 1935, particularly Measles and Whooping Cough.

In addition the Health Visitors excluded children for the undermentioned reasons :—

Mumps	1
Tonsillitis, etc.	39
Impetigo, Sores	28
Other Infectious Diseases ...	12
Minor Injuries	—
Other Ailments	437

No school or portion of a school was closed during the year on account of the prevalence of Infectious Diseases. School Medical Officers or Nurses visit any schools in which an abnormal number of cases has occurred, and such visit is sometimes accompanied by the swabbing of a class or the close inspection of each scholar as to nasal discharge, etc., etc.

During the year 19 certificates were given that the attendance of a Department had fallen below 60 per cent. owing to the prevalence of epidemic illness.

IX.

OPEN-AIR EDUCATION.

The Certified Open-Air School (Whitton) is dealt with under the section " Blind, Deaf, Defective and Epileptic Children."

(*a*) Playground Classes.

Four open-air classrooms on four playfields were used during the year.

(*b*) Open-air Classrooms in Public Elementary Schools.

In the recently built schools it is possible to throw open one or more sides of the classrooms.

(c) School Journeys and Camps.

Nothing of this sort has been carried out in Ipswich.

X.

PHYSICAL TRAINING.

The Report of Mr. W. Tye, the Organiser of Physical Training, is appended :—

IPSWICH EDUCATION COMMITTEE.
PHYSICAL TRAINING REPORT, 1937.

Introduction.

The importance of a sound system of physical training in our schools to-day is constantly being emphasised and is becoming increasingly realised. Undoubtedly it is during childhood, when the body is supple and growth comparatively rapid, that systematic exercise, wisely planned and well taught, is very necessary. It is during those early formative years when the foundation of health and robustness of body is largely laid. Other factors, such as food and environment, naturally have much influence, but provided these are favourable it remains for a well-balanced physical education to bring the body, and to some extent the mind, to full maturity and control.

Fortunately our Elementary Schools generally have for many years realised the value of physical training as a necessary part of the school curriculum. In consequence, all concerned have made a steady but definite effort to improve all those conditions essential to progress. Each successive year sees increased facility, improvement in teaching technique and a correspondingly better response from the children. The later sections of this Report will fully justify and elaborate this.

Standard of Attainment.

The attainment of a sound system of physical training in the schools is dependent upon—(1) suitable accommodation, (2) an efficient syllabus of instruction, (3) a supply of well-trained teachers, and (4) the children being suitably dressed to benefit from the instruction.

(1) The Committee are obviously fully aware of the necessity for accommodation for the physical activities, both indoor and outdoor. This is shown by their provision of suitable rooms in all new schools, and in those schools where structural alterations are being carried out as part of the general scheme of reorganisation. As a further proof of the Committee's interest in the matter, plans are at present being prepared for a gymnasium, in addition to a hall, for the new Senior South-Eastern School.

(2) The Board have provided the Schools with an excellent Syllabus of Training for Junior Schools, which is sufficiently elastic to allow of its use in parts for older children. It is hoped, however, that the

Syllabus for more advanced work in the fully reorganised Senior Schools will soon be forthcoming. In the meantime the teachers in such Senior Schools are compiling their own Table Cards of exercises under the advice of the Organisers.

(3) As far as the training of the teachers is concerned, local arrangements are made from time to time for short Refresher Courses. In the main these have been well attended, and the majority of the teachers are now conversant with the latest Syllabus of Physical Training and the modern methods of instruction. In addition, the Committee have provided grants to help teachers attending Summer Courses, and many have taken advantage of this facility.

(4) It is the unsuitability of the dress of the children, particularly as regards footgear, that is the greatest obstacle to progress. As only a small proportion of the children are suitably dressed during their Physical Training lesson a large majority do not get the full benefit from the instruction. Most of the Head Teachers and the Organisers realise the present position in the matter, and in certain schools much has been done to overcome this real difficulty. There are still several schools, however, which will make no further progress unless a concerted effort is made to secure suitable clothing and footgear.

Subsequent.

Later details in this Report will give further evidence that the Authority, the Organisers and the Teachers generally are working together to secure, as far as possible, improved conditions for the physical education of the Borough children.

General Organisation.

The general organisation continues on the same lines as the previous year. Miss W. M. Saunders, who has done very good work indeed in the Borough Schools since 1930, has been replaced by Miss R. E. Bennett. The Organisers spend in total three days each week in the Borough Elementary Schools, supervising the Physical Training generally, and giving advice to the head and class teachers on organisation and teaching methods. In addition, they visit the numerous Playing Fields belonging to the Committee, and the Swimming Baths, to advise the teachers concerned on the most suitable methods of instruction. Teachers' Classes are also arranged when necessary to give every teacher the opportunity of becoming acquainted with the Board's latest Syllabuses of Physical Training.

Routine Visits.

The routine visits to the Schools are helpful both to the Organisers and the teachers. Such visits give opportunity for—

(1) Discussion with the Head Teachers as to general organisation.

(2) Seeing the children at exercise under the actual conditions of each school.

(3) Talks with the class teachers on the progress of the children, and any difficulties the teachers may have encountered.

These visits also provide a means whereby the Organisers can assess the value of the Teachers' Classes, such as the effect of the training on the teachers, especially as regards their teaching technique and degree of enthusiasm.

It is, of course, always the endeavour of the Organisers to help the teachers as far as possible, and often, by means of demonstrations on the spot, they try to stimulate both teachers and scholars to greater effort.

Training of Teachers.

The training of the teachers is one of the most important duties of the Organisers. Local arrangements for Teachers' Classes have been made intermittently since 1929; during this time over 400 teachers have taken advantage of such classes.

During this current year a Physical Training Class for men teachers in the Senior Schools has been arranged. This class has a membership of 22 Borough teachers, and is particularly helpful to those teachers who have been unable to attend Summer Courses, and have hitherto had little or no knowledge of more advanced exercises involving the use of apparatus. Moreover, this class should be of some value to the Authority in the staffing of the new Senior Schools on the Physical Training side.

Suggestions will shortly be made to the Authority as to forming a similar class for women teachers in Senior Schools.

Outstanding Features.

The outstanding features of this year have been (1) the development of facility for Physical Training, (2) a mass demonstration of Physical Training, and (3) the improvement of the schools' time-tables.

In accordance with the Committee's scheme for general reorganisation, all the schools in the Central and South-Eastern areas, excepting the non-provided schools, have now got suitable inside accommodation for physical exercises. This is indeed a great asset, as arrangements can now be made there for the children to have daily exercise throughout the year. The two Central Senior Schools are particularly fortunate in that they have both fixed and portable apparatus, which will enable a more advanced programme of training.

The St. Margaret's V. School now has the use of a very good hall close to the school, and this facility, although not regular, has led to a considerable improvement in the physical training of the school.

DEMONSTRATIONS.

At the invitation of the Schools' Sports Association, a massed Physical Training Display was arranged at their annual Schools' Sports. Every Senior and Junior School took part; over 600 children in all performed a series of attractive exercises, which obviously gave delight to both children and parents. Apart from the pleasure arising out of this demonstration, it served other good purposes, such as an increase of interest in the subject in the schools and a greater willingness on the part of many parents to dress their children more suitably for their daily lessons.

TIME-TABLES.

Since the issue of Circular 1445 the Committee have requested the Elementary Schools to arrange for a daily period of organised activity. The Head Teachers, realising the value of regular and systematic training, willingly co-operated to make suitable time-table arrangements. Thus, where accommodation and weather permit, every child in the Borough Elementary Schools now has daily opportunity for some form of physical recreation.

SWIMMING.

Swimming is becoming an increasingly important branch of the schools' physical activities. The figures given below show that there has been a steady increase in the demand for swimming instruction during recent years. Undoubtedly swimming is a comparatively cheap and healthy form of recreation which boys and girls can continue after leaving school. Happily, the Town Council are building two more swimming baths in necessitous parts of the Borough, which, if available, will be a boon to schools in their vicinity. Life Saving instruction is growing in the schools. This year six classes (120 children) were arranged, and were all taught by teachers from the schools, who have qualified to teach the subject. The results in the Life Saving Examinations were :—

(1) Elementary Certificates	... ...	66
(2) Intermediate Certificates	... ...	22
(3) Bronze Medallions	... ...	5

This is sufficient evidence to show that the boys and girls were keen, and that the instruction was successful and efficient. The Committee is fortunate in having so many teachers capable of giving advanced instruction in swimming.

The usual arrangements were made this year for learners to receive instruction in the Borough Swimming Baths. The results were :—

	Boys.	Girls.
(1) Number receiving instruction ...	1,060	904
(2) Number obtaining 25 yds. Certs.	111	133
Number obtaining 45 yds. Certs.	218	161
(3) Total number of Certs. (Boys and Girls)		623

The Schools' Sports Association are to be congratulated on their Swimming Gala held again in St. Matthew's Baths. The Gala was very well organised indeed, every year becoming more interesting and educational. The teachers are wise in including "comic" events in the programme, which consists mainly of items where stamina and endurance are required. The Display by the Ipswich Swimming Club, and the address by Mr. A. Moffat, who for many years has been interested in the swimming of the schools, were much appreciated.

PLAYING FIELDS.

With the exception of the Norwich Road district, where a Playing Field is being prepared, all the schools (10+ children) have now got access to the Committee's own excellent playing fields, which are equipped with classrooms, lavatories and shelters. In addition, the Committee employ a staff of groundsmen, supplied with modern machinery for cutting and rolling. The schools are particularly well looked after as regards facility for games and athletics.

Generally the schools take full advantage of the Committee's Playing Fields, which lie conveniently round about the town. The attendance is good, the schools rarely missing their games period, except in very inclement weather. Thus the school games are now assisting in developing a sturdier outlook and an indifference to weather conditions, which will help the scholars to build up a stronger constitution with greater resistance against disease. There is still, however, need for more attention to be given to the hygiene of games, so that both children and parents realise the value of a change of clothing for vigorous physical activities.

(Signed) W. TYE,
Organiser of Physical Training.

31st December, 1936.

XI.

PROVISION OF MEALS.

(*a*) MEALS.

Children are supplied with breakfasts, dinners and morning milk free of cost, provided they are necessitous within the meaning of the Education Act. During the year 28 children were supplied with meals. All applications are submitted to the School Medical Officer for his recommendations.

It is much to be regretted that parents do not more fully avail themselves of the facilities offered for the provision of meals for their children.

(*b*) MILK CLUBS IN SCHOOLS.

Every school has its Milk Club, and the one-third pint of milk for ½d. is an extremely valuable adjunct to the dietary of the growing child.

The numbers decreased during the year, as the undermentioned figures indicate :—

Date	Parents Paying.	Milk paid for by Education Committee.	Milk paid for by Public Assistance Committee.	Total
January 31st.	3,377	988	557	4,922
February 28th.	3,220	1,004	593	4,817
March 27th.	3,385	1,030	564	4,979
May 29th.	3,240	1,012	561	4,813
June 26th.	3,141	1,010	517	4,668
July 24th.	3,062	1,010	490	4,562
September 25th.	3,239	932	498	4,669
October 30th.	3,129	923	464	4,516
November 27th.	3,401	935	456	4,792
Average	3,244	982	522	4,748

During the first three months of the scheme (October-December, 1934), an average of 7,125 children were taking milk, and it is rather disappointing to note that this figure has fallen to 4,748 in spite of propaganda and " Drink more milk " campaigns.

Samples of milk are taken from each contractor once a month and submitted to the County Laboratory. The majority of the samples were very satisfactory and it was necessary only in a few instances to draw the attention of the supplier to the fact that the milk was below the usual standard.

XII.

CO-OPERATION OF PARENTS, TEACHERS, SCHOOL ATTENDANCE OFFICERS AND VOLUNTARY BODIES.

(*a*) Parents.

Parents are invited by printed notice to attend at the School when their children are to undergo Routine Medical Inspection, but it is not usual for them to be present at Following Up Examinations.

The number of parents attending the Routine examinations was 2,637 or 91% of the total children examined.

Many also accompany their children to the School Clinic.

Parents are invited from time to time to attend at the schools for lectures by the School Dental Surgeons, and advantage is taken at that time to point out dental defects.

The attendance and co-operation of the parents facilitates all branches of inspection and treatment.

(*b*) TEACHERS.

Without the active co-operation of Teachers, the School Medical Service would function imperfectly, and the thanks of the School Medical and Dental Staffs are due to all members of the Teaching profession who have, during the past year and in some cases for many years, done everything possible to assist the service.

School Attendance Officers are always willing to assist and valuable help has also been afforded by the Voluntary Association for Mental Welfare and the National Society for the Prevention of Cruelty to Children.

XIII.

BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

(*a*) BLIND.

Table III. (Statistical Tables) gives particulars with regard to the Blind and Partially Blind children.

It will be seen that the Education Committee is responsible for the maintenance of three children at Certified Schools for the Blind.

(*b*) DEAF.

If the same Table is referred to, it will be seen that 12 Ipswich children are at Certified Schools for the Deaf.

(*c*) MENTALLY DEFECTIVE.

34 children were examined under this heading during 1936 and in addition 8 cases were re-examined.

The results of the examinations were as follows :—

Classified as --	Males	Females.	Total.
Feeble Minded M D ..	17	10	27
Imbeciles	1	1	2
Idiots		—	—
Total Certified	18	11	29

Of the remainder 12 were "Dull and Backward" and 1 "Backward."

This by no means represents the ascertainable figure, as there are fully 49 children on the list for examination, and 10 for re-examination.

The following Table compares the figures of 1936 with those of previous years :—

Year.	CLASSIFICATION.														
	Feeble-Minded.			Imbeciles.			Idiots.			Dull and Backward.			Total.		
	M.	F.	T.	M.	F.	T.	M.	F.	T	M	F.	T.	M.	F.	T.
Average 1921-1925	18	11	29	2	4	6	—	—	—	20	12	32	40	27	67
1926-1930	10	10	20	4	3	7	—	—	—	13	14	27	27	27	54
1931-1935	9	8	17	1	2	3	1	—	1	9	5	14	20	15	35
1932	8	6	14	—	1	1	2	1	3	14	5	19	24	13	37
1933	5	7	12	1	2	3	1	—	1	2	5	7	9	14	23
1934	9	4	13	—	4	4	—	1	1	11	8	19	20	17	37
1935	6	3	9	1	—	1	1	—	1	4	2	6	12	5	17
1936	17	10	27	1	1	2	—	—	—	4	8	12	22	19	41

Ipswich has a Special School for this type of child at Britannia Road, and the register shows the following figures :—

	Boys.	Girls.	Total.
On Register December, 1935, ...	42	21	63
Admitted during the year	10	7	17
Left during the year	10	6	16
Remaining on Register December, 1936.	42	22	64

I append a report from Dr. A. W. Gaye upon the Britannia Road Special School :—

BRITANNIA ROAD SPECIAL SCHOOL.

The number in attendance at the end of the year was 64. It should be noted, however, that there were, during 1936, 11 other children requiring special education, 6 of whom are at private schools and 5 at ordinary schools.

The grade of the school continues low. The average mental age of the children when examined works out at 7 years 11 months, or expressed as a percentage of actual age—60.

14 children left the school during the year, 3 girls and 11 boys. Of the 3 girls, 2 are earning wages of 10s. a week and the other one more. Each one of them has retained the same job since leaving school. Of the 11 boys, 2 have gone to the Royal Eastern Counties Institution, Colchester. 1 has been placed under guardianship, 1 is employed in the kitchen at

the Special School, 6 have retained employment, only 1 was unable to obtain work.

An entertainment was given by the children at the end of the Christmas term, and was enjoyed alike by performers and audience. In addition to a large number of mothers, there were a number of visitors, all of whom showed considerable interest in the school and were very welcome.

Thanks must be accorded to the Head Mistress and her Staff, not only for their special interest in the children during the year, but also the special efforts involved in producing the Entertainment.

A. W. GAYE,
Deputy School Medical Officer.

(*d*) PHYSICALLY DEFECTIVE.

This group includes Tuberculosis, Delicate and Crippled children and children with Heart Disease, and figures with regard to them will be found upon reference to Table III.

Ipswich possesses its own Sanatorium and beds can usually be found for children requiring them.

Arrangements are also in force with the local Hospital for any orthopædic work which may be necessary.

The Education Committee also has its own Open Air School at Whitton, a suburb of Ipswich.

The Whitton Open Air School Register gives the following figures :

	Boys.	Girls.	Total.
On Register December, 1935 ...	50	60	110
Admitted during the year ...	31	24	55
Left during the year	26	31	57
Remaining December, 1936 ...	55	53	108

A report by Dr. A. W. Gaye upon the Whitton Open Air School is appended :—

WHITTON OPEN AIR SCHOOL.

The number discharged (and admitted) was slightly less than in 1935.

13 children were discharged at 14 years of age. All of the 4 boys obtained work and 6 of the 9 girls. Of the remaining discharges, 19 boys and 15 girls returned to the ordinary elementary school, 5 left the district, 1 boy was admitted to the Ogilvie Home at Clacton, 1 girl to the Special School, 1 boy and 1 girl to the Sanatorium, and 1 girl was excluded.

The following Table shows the causes of their admission to the school :—

	Dicharges.		Admissions.	
	Boys.	Girls.	Boys.	Girls.
Quiescent Tubercular Disease ...	3	2	1	3
Pretubercular	2	3	–	2
Sub-normal Nutrition ...	6	6	2	—
Anæmia	–	1	–	1
General Delicacy	9	5	24	7
Other diseases	6	14	4	11
	26	31	31	24

The Table shows a similar distribution to that of previous years except in one respect.

During the year only two cases (both boys) were admitted because of sub-normal nutrition, whereas in 1935 12 were admitted, but on the other hand there were 31 children suffering from general delicacy as against 22 in the previous year. Probably a number of them might be put in either category, as it is quite usual to find sub-normal nutrition in association with general delicacy.

The percentage attendance during the year was just over 85, there being only a slight difference between boys and girls.

Free milk each morning has been continued and an increasing amount of cod liver oil has been needed.

All the children are medically examined from time to time and a dental inspection took place in September. Special efforts have been made to persuade parents that attention to the state of the mouth and teeth will aid in the production of improved health in association with the fresh air conditions for education provided.

All the children were also inspected three times during the year by a Nurse from the point of view of cleanliness.

Daily attention is given to personal hygiene under the teacher's supervision.

A wet summer somewhat disturbed the open air rest, but nevertheless the daily hour's rest was taken in the open air on 137 days, indoors 66, and on 11 partly in and partly outside.

Three open days were held and were well attended by visitors. Entertainments were given by the children. Credit is due, not only to the children, who showed both interest and energy, but also to the teachers for the amount of time and patience spent. In addition, the school was attended by students from Training Colleges and visitors from Poland, South Africa and Sweden.

The school was represented at the third International Congress on open air schools by the Headmistress (Miss N. V. King) as one of 45 delegates from England.

Credit is due to all her staff for the interest shown, and work on behalf of the children.

A. W. GAYE,
Deputy School Medical Officer.

(e) Supervision of Mentally Defective Children not in Special School.

This is performed on behalf of the Education Committee by the Local Branch of the Mental Welfare Association.

The following information was kindly provided by Miss C. A. Woolston, Secretary of the Association.

LEAVERS FROM BRITANNIA ROAD SPECIAL SCHOOL, 1924-1936.

From September, 1924, until December, 1936, 100 boys and 71 girls have left the Britannia Road Special School. The following statistics show what has happened to these boys and girls up to December, 1936:—

	M.	F.	Total.
Regularly Employed	38	25	63
Irregularly Employed	3	6	9
Little or no Employment	6	3	9
Unemployed through Illness	1	0	1
Unemployable	8	9	17
Admitted to Training Homes or Institutions ...	20	15	35
Placed under Guardianship	5	1	6
Lost Sight of	1	4	5
Discharged	11	7	18
Removed from the Area	5	1	6
Dead	2	0	2
	100	71	171

After Care.

During 1936 after care for these School Leavers was provided by the Ipswich Mental Welfare Association as follows:—

	M.	F.	Total.
Friendly Supervision	15	14	29
Statutory Supervision	41	35	76
	56	49	105

XIV.

FULL-TIME COURSES OF HIGHER EDUCATION FOR BLIND, DEAF, DEFECTIVE AND EPILEPTIC STUDENTS.

(a) The Education Committee arrange for the training of these students at Residential Institutions. Each case is considered on its merits after considering the report of the School Medical Officer, any recommendations made by the Ipswich Blind Society in the case of adults, and, where a child is already in an Institution, the report of the Principal of the Institution.

The number of trainees at Residential Institutions during the year under review was—blind 5, cripple 1, epileptic 1.

(b) No courses are maintained by the Authority.

(c) The training of two blind persons was completed during the year, and both are now employed by the Ipswich Blind Society.

XV.

NURSERY SCHOOLS.

There is no Nursery School in Ipswich.

XVI.

SECONDARY SCHOOLS AND OTHER INSTITUTIONS OF HIGHER EDUCATION.

The School Medical Service is concerned with the following Schools :—

Ipswich School.	Aided Higher School for Boys.
High School for Girls.	,, ,, ,, ,, Girls.
Northgate Schools.	Provided Secondary Schools for Boys and Girls.

(1) MEDICAL INSPECTION.

Routine Medical Inspections are carried out at the Ipswich and Northgate Schools and the following Table gives the number of children examined :—

School.	Examined.	No. of Defects Found.*	No. of following Up or Re-examinations.
Ipswich School	48	17	85
Northgate Boys	250	34	99
Northgate Girls	149	29	99
Total	447	80	283

*Excluding Dental Defects and Malnutrition.

In addition 74 boys were examined as to fitness for sports.

The defects found, excluding Dental, can be classified as follows :—

Defect.	Ipswich School.		Northgate Boys.		Northgate Girls.	
	Treatment.	Observation.	Treatment.	Observation.	Treatment.	Observation.
Malnutrition (see special Table below)	—	—	—	—	—	—
Other Diseases, Skin (Non. T.B.) ...	—	1	1	13	—	9
EYES—						
Blepharitis	—	—	—	1	—	—
Defective Vision	1	2	20	9	11	22
Squint	—	—	—	1	—	—
Other Conditions	—	—	—	1	—	—
EARS—						
Defective Hearing	—	—	—	1	1	2
Other Diseases	—	—	—	2	—	—
NOSE AND THROAT—						
Enlarged Tonsils	—	2	—	4	—	15
Adenoids	—	—	—	—	—	5
Other Conditions	—	—	—	2	2	5
GLANDS—						
Enlarged Cervical	—	—	—	8	—	5
SPEECH—						
Defective	—	—	—	1	—	1
HEART CIRCULATION—						
Functional	—	—	1	3	—	4
Anaemia	—	—	—	3	—	1
LUNGS—						
Other Non. T.B. Disease ...	—	1	—	4	1	6
TUBERCULOSIS—						
Suspected T.B. Lungs ...	—	—	—	—	—	—
NERVOUS SYSTEM—						
Other Conditions	—	—	—	—	—	—
DEFORMITIES—						
Spinal Curvature	—	—	—	—	5	3
Other Forms	16	3	8	3	9	9
OTHER DEFECTS	—	2	3	5	—	11
TOTAL ...	17	11	33	61	29	98

MALNUTRITION.

The following Table gives the results of examinations of the R.M.I. groups so far as nutrition is concerned :—

	Ipswich School		Northgate Boys.		Northgate Girls.	
	No.	%	No.	%	No.	%
Excellent	5	10 5	42	16.8	22	18 6
Normal	41	85.4	182	72 8	86	72 9
Slightly Sub-Normal	2	4 1	26	10.4	10	8 5
Bad	—	—	—	—		

R.M.I. and Special Inspections are not carried out at the High School for Girls.

(2) Following up and Medical Treatment.

The figures as to "following up" examinations have been given in a foregoing Table.

Free Treatment is afforded by the Committee in Scholarship cases, and for minor ailments in the case of fee-paying pupils.

XVII.

PARENTS' PAYMENTS.

The Education Committee has fixed the undermentioned charges for the treatment of school children :—

Tonsils and Adenoids, operative treatment, 5/- (including operation and subsequent treatment).

Provision of Spectacles and other medical appliances : Cost price.

Dental : 6d. for the first attendance. with a maximum charge of 1/- should further attendance be necessary to complete the treatment required.

Minor Ailments : Free.

The scale of charges refer to Public Elementary School Children only. The fees are paid at the School Clinic generally at the same time as treatment is carried out.

So far as fee-paying pupils at Secondary Schools are concerned, the above scale applies, except as under :—

Tonsils and Adenoids, operative treatment, 17/- (including operation and subsequent treatment).

Dental : 2/- per attendance.

The amount collected for the last financial year (1935-6) was £131 1s. 0d.

XVIII.

HEALTH EDUCATION.

A "Health Week" was arranged by the Public Health Committee and held during the week commencing November 16th, 1936.

The Education Committee collaborated in this effort and the morning sessions were devoted to school children. Parties of 200 children of twelve years of age and over attended at the Public Hall and received a short lecture and film display, after which they toured the Exhibition. Three parties were accommodated each morning from Tuesday to Friday inclusive, whilst on Saturday morning two parties attended from the Higher Schools.

In addition, teachers were requested to give special mention to health matters during the ordinary school sessions of that week.

The following propaganda work was also carried out during the year :—

1.—Dental Lectures.

No special dental lectures were given during 1936 owing to the holding of a "Health Week" during the autumn. During that week one of the School Dental Surgeons was always on duty at the stall of the Dental Board of the United Kingdom, and many lecturettes were given to both parents and children.

2.—"Better Health."

The Public Health Committee deals with 5,000 copies of this useful publication each month, and every school teacher in the town receives a copy. In addition, 50, 100 or 200 copies are forwarded to each school according to size, for distribution amongst scholars.

3.—Leaflets.

The Dental Board's leaflet "What about your teeth" is supplied to schools on request. These are given to the "leavers."

XIX.

SPECIAL INQUIRIES.

No special inquiries were carried out during 1936.

XX.

MISCELLANEOUS.

(*a*) Employment of School Children.

Total number of medical examinations during 1936 was 287.

Number passed on first examination ...	197
,, passed on re-examination ...	63
,, re-examined	18
,, withdrawn on re-examination ...	7
,, refused	2
Total	287

An increase of 24 (9.5 per cent.) on the previous year.

(*b*) Stammerers.

During the year a change of staff took place. Miss J. M. Moore resigned with effect from the end of July, and Miss S. D. Miller took over the classes after the August holidays.

The reports of both teachers are appended.

CLASSES FOR STAMMERERS AND SPEECH DEFECTIVES.

(i.) Period January to July, 1936.

Classes for Stammerers have been held for one hour twice a week at the centres at London Road, St. Helen's, Clifford Road and Nacton Road.

Classes for Speech Defectives have been held at the same centres for half an hour twice a week.

25 children have attended the Stammerers' Classes, of whom 4 have been discharged as cured.

34 children have attended the Speech Defective Classes, of whom 13 have been discharged.

The following Table indicates the figures and types of Speech Defective children that attended.

No. of cases.	Type of defect.	Cause.
21	Defective Articulation.	Nervous instability.
3	Lalling.	,, ,,
3	Lisping.	,, ,,
27	Cases of Neurotic Speech Defects.	
1	Nasal Speech.	Weakness of the Soft Palate.
1	Lisping.	Dentition and High Palate.
1	Defective Articulation.	High Palate.
1	,, ,,	Enlarged Tonsils.
1	,, Speech.	Defective Hearing.
2	Cleft Palate.	(1) Soft Palate Cleft operated on. (2) Soft Palate Cleft not operated on.
7	Cases of Organic Speech Defects.	

The classes have been small, this has been beneficial as individual treatment is essential since Organic Speech Defects require special exercises suited to the particular defect. Also Stammering and Neurotic Speech Defects being symptoms of general nervous instability, treatment is taken on lines of personal readjustment, towards the promotion of self-confidence and control. This is more easily practised when the classes are small.

Throughout the year a definite correlation has been noted between the progress in stability and self-confidence and speech made at the Centre, and in the general work, power of concentration, outlook and a return to the normal that is shown at school. In this connection the reports issued from the Centres to the school have been very valuable.

J. MOORE,
Speech Therapist.

(ii.) PERIOD AUGUST-DECEMBER, 1936.

58 cases received treatment during this time at the following centres :—

London Road C. School.
St. Helen's C. School
Clifford Road C. School.
Bramford Road C. School.
Priory Heath C. School.

4 of the 21 Stammering Classes, and 6 of the 37 Speech Defectives, were discharged. One Stammerer reached school-leaving age before her cure was completed, and one Speech Defective was transferred to Britannia Road Special School.

The method of treatment is similar to that previously practised at these classes.

In the case of stammerers, individual Practice Charts, showing the amount of *daily* practice done at home, have proved especially helpful.

Appreciation is due to the teachers and parents who co-operate so readily in supplying information on each individual; and particularly in ensuring regular attendance at the various centres—however bad the weather, or however young the child. The value of this in contributing to the success of the treatment cannot be over-emphasised.

I should like to point out that the scope of this work could be advantageously widened if the more rare types of speech defects could receive benefit.

e.g., Word Deafness.
Word Blindness.

Both cases in which it is difficult to diagnose the cause of the child's apparent inability to cope with the elementary stages of reading and writing. A course in the oral and visual recognition of sounds would result in an improvement in general progress.

S. D. MILLER,
Speech Therapist.

(c) Public Elementary Schools and School Population.

The following Table gives the number of Public Elementary Schools and the approximate number of Elementary School Children :—

	1934.	1935.	1936.
Number of Public Elementary Schools ...	27	26	29
Average number on School Registers ...	11,963	11,621	11,538
Average attendance of children at School	10,863	10,580	10,479

Thus the school population is declining slowly but steadily.

TABLE I.

MEDICAL INSPECTIONS OF CHILDREN ATTENDING PUBLIC ELEMENTARY SCHOOLS.

A.—ROUTINE MEDICAL INSPECTIONS.

Number of Inspections in the prescribed Groups :—	
Entrants	1,364
Second Age Group	1,122
Third Age Group	412
Total	2,898
Number of other Routine Inspections ...	—
Grand Total ...	2,898

B.—OTHER INSPECTIONS.

Number of Special Inspections	6,174
Number of Re-Inspections	9,847
Total	16,021

C.—CHILDREN FOUND TO REQUIRE TREATMENT.

Number of individual children found at Routine Medical Inspection to require Treatment (excluding Defects of Nutrition, Uncleanliness and Dental Diseases).

Group.	For defective vision (excluding squint).	For all other conditions recorded in Table II. A.	Total.
(1)	(2)	(3)	(4)
Entrants	7	86	93
Second Age Group ...	82	51	133
Third Age Group ...	28	11	39
Total (Prescribed Groups)	117	148	265
Other Routine Inspections	—	—	—
Grand Total ...	117	148	265

TABLE II.

A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1936.

Defect or Disease.		ROUTINE INSPECTIONS. No. of Defects.		SPECIAL INSPECTIONS. No. of Defects	
		Requiring Treatment.	Requiring to be kept under observation, but not requiring treatment	Requiring Treatment.	Requiring to be kept under observation, but not requiring treatment
(1)		(2)	(3)	(4)	(5)
Skin	Ringworm—Scalp ...	—	—	8	—
	Body ...	—	—	9	—
	Scabies	1	—	22	—
	Impetigo	4	10	151	—
	Other Diseases (Non-Tuberculous)	3	21	541	5
Eye	Blepharitis	1	7	40	—
	Conjunctivitis	—	3	64	—
	Keratitis			2	—
	Corneal Opacities ...		—	—	—
	Other Conditions (excluding Defective Vision and Squint)	2	13	84	3
	Defective Vision (excluding Squint)	117	82	73	—
	Squint	7	17	11	—
Ear	Defective Hearing ...	7	24	8	3
	Otitis Media		4	61	—
	Other Ear Diseases ...	1	6	69	1
Nose and Throat	Chronic Tonsillitis only	26	243	20	97
	Adenoids only	12	36	11	3
	Chronic Tonsillitis and Adenoids	15	14	23	1
	Other Conditions ...	1	24	208	2
Enlarged Cervical Glands (Non-Tuberculous)			314	37	95
Defective Speech		8	15	24	1
Heart and Circulation	Heart Disease Organic ...	1	8	5	—
	Functional	2	25		1
	Anæmia	—	18	9	
Lungs	Bronchitis	2	54	48	4
	Other Non-Tuberculous Diseases	6	121	3	4

TABLE II.—Continued.

	Pulmonary—Definite ...	1	4	3	—
	Suspected ...	3	8	6	12
Tuberculosis	Non-Pulmonary—				
	Glands	1	5	12	1
	Bones and Joints ...	—	1	—	—
	Skin	—	—	—	—
	Other Forms	—	—	—	—
Nervous System	Epilepsy	—	6	3	—
	Chorea	—	—	5	—
	Other Conditions ...	—	11	4	4
Deformities	Rickets	—	—	—	—
	Spinal Curvature ...	5	20	4	—
	Other Forms	1	30	15	—
Other Defects and Diseases (excluding Defects of Nutrition, Uncleanliness and Dental Diseases)		40	119	2,062	28
Total Number of Defects ...		267	1,263	3,645	265

B.—CLASSIFICATION OF THE NUTRITION OF CHILDREN INSPECTED DURING THE YEAR IN THE ROUTINE AGE GROUPS

Age groups.	Number of Children Inspected.	A (Excellent)		B (Normal)		C (Slightly subnormal)		D (Bad)	
		No.	%	No.	%	No.	%	No	%
Entrants ...	1361	129	9 45	1010	74 04	219	16 05	6	14.
Second Age-group	1122	142	12 65	790	70 41	187	16 6	3	26
Third Age group	412	52	12.62	293	71.11	67	16 26	—	—
Other Routine Inspections ...	-	—	—	—	—	—	—	—	—
Total ...	2898	323	11 14	2093	72 22	473	16 32	9	.31

TABLE III.

RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

Blind Children.

At Certified Schools for the Blind	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total
3	1	—	1	5

Partially Sighted Children.

At Certified Schools for the Blind	At Certified Schools for the Partially Sighted	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
—	—	8	1	—	9

Deaf Children.

At Certified Schools for the Deaf	At Public Elementary Schools.	At other Institutions.	At no School or Institution	Total.
12	—	3	—	15

Partially Deaf Children

At Certified Schools for the Deaf	At Certified Schools for the Partially Deaf	At Public Elementary Schools	At other Institutions	At no School or Institution	Total.
1	—	8		—	9

TABLE III.—Continued.

MENTALLY DEFECTIVE CHILDREN.

FEEBLE-MINDED CHILDREN.

At Certified Schools for Mentally Defective Children.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total
64	5	6	14	89

EPILEPTIC CHILDREN.

CHILDREN SUFFERING FROM SEVERE EPILEPSY.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
1	—	—	1	2

PHYSICALLY DEFECTIVE CHILDREN.

A. TUBERCULOUS CHILDREN.

1.—CHILDREN SUFFERING FROM PULMONARY TUBERCULOSIS. (Including pleura and intra-thoracic glands.)

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	—	21	1	22

2.—CHILDREN SUFFERING FROM NON-PULMONARY TUBERCULOSIS.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total
1	12	3	1	17

TABLE III.—Continued.

B. Delicate Children.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
104	568	4	1	677

C. Crippled Children.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
4	12	2	6	24

D. Children with Heart Disease.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
8	15	1	1	25

CHILDREN SUFFERING FROM MULTIPLE DEFECTS.

Combination of Defect.	At Certified Special Schools	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total
Non-Pul. T.B. and Feeble Minded	1	—	—	—	1
Heart Disease and Feeble Minded	2		—	—	2
Cripple and Feeble Minded ...	1		—	—	1
Epileptic and Feeble Minded ...	1		1	—	2
Deaf and Dumb and Feeble Minded	1		—	—	1
Total	6		1	—	7

TABLE IV.

TREATMENT TABLES.

Group I.—Minor Ailments (excluding Uncleanliness, for which see Table VI.).

Disease or Defect. (1)	Number of Defects Treated, or Under Treatment During the Year		
	Under the Authority's Scheme. (2)	Otherwise. (3)	Total. (4)
Skin—			
Ringworm-scalp. (1) X-Ray Treatment. If none, indicate by dash	2	—	2
(2) Other	5	1	6
Ringworm, body	3	6	9
Scabies	23	—	23
Impetigo	83	72	155
Other skin disease	253	291	544
Minor Eye Defects— (External and other, but excluding cases falling in Group II). ...	119	74	193
Minor Ear Defects	79	52	131
Miscellaneous— (e.g. minor injuries, bruises, sores, chilblains, etc.)	841	1,092	1,933
Total	1,408	1,588	2,996

Group II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I.).

Defect or Disease	Number of Defects dealt with.			No. of children for whom spectacles were			
				Prescribed. (1)		Obtained (2)	
	Under the Authority's Scheme.	Otherwise.	Total	(i) Under the Authority's Scheme	(ii) Otherwise.	(i) Under the Authority's Scheme	(ii) Otherwise.
Errors of Refraction (including Squint) (Operations for Squint should be recorded separately in the body of the Report) ...	428	5	433	319	5	311	4
Other Defect or Disease of the Eyes (excluding those recorded in Group I).							
TOTAL. ...	428	5	433	324		315	

Group III.—Treatment of Defects of Nose and Throat.

NUMBER OF DEFECTS.													
Received Operative Treatment.												Received other forms of Treatment.	Total number Treated.
Under the Authority's Scheme, in Clinic or Hospital. (1)				By Private Practitioner or Hospital, apart from the Authority's Scheme. (2)				Total. (3)				(4)	(5)
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
3	5	64	1	–	–	1	–	3	5	65	1	33	107

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and Adenoids.
(iv) Other defects of the nose and throat

Group IV.—Orthopaedic and Postural Defects.

	Under the Authority's Scheme. (1)			Otherwise. (2)			Total number treated.
	Residential treatment with education. (i)	Residential treatment without education. (ii)	Non-residential treatment at an orthopaedic clinic. (iii)	Residential treatment with education. (i)	Residential treatment without education. (ii)	Non-residential treatment at an orthopaedic clinic. (iii)	
Number of children treated	3	1	—	—	—	27	31

Table V.—Dental Inspection and Treatment.

(1) Number of children inspected by the Dentist :—

(*a*) Routine age-groups :—

Age	Number		
5	817		
6	790		
7	924		
8	950		
9	994	Total	9,198
10	1,017		
11	1,101		
12	1,098		
13	1,196		
14	311		

(*b*) Specials		1,967
(*c*) Total (Routine and Specials)		11,165
(2) Number found to require treatment		7,304
(3) Number actually treated		4,164
(4) Attendances made by children for treatment		5,610

(5) Half-days devoted to :—

Inspection	104	Total	1,173
Treatment	1,069		

(6) Fillings :—

Permanent Teeth	3,014	Total	3,133
Temporary Teeth	119		

(7) Extractions :—

Permanent Teeth	1,003	Total	6,558
Temporary Teeth	5,555		

(8) Administrations of general anæsthetics for extractions ...	2,887

(9) Other Operations :—

Permanent Teeth	1,673	Total	1,733
Temporary Teeth	60		

Table VI.—Uncleanliness and Verminous Conditions.

(i.) Average number of visits per school made during the year by the School Nurses	5.9
(ii.) Total number of examinations of children in the Schools by School Nurses	42,443
(iii.) Number of *individual* children found unclean	606
(iv.) Number of *individual* children cleansed under Section 87 (2) and (3) of the Education Act, 1921	3
(v.) Number of cases in which legal proceedings were taken :—	
(a) Under the Education Act, 1921	nil.
(b) Under School Attendance Byelaws	nil.

A. M. N. PRINGLE,

School Medical Officer.